

TRANSCRIPT OF RECORD.

UNITED STATES CIRCUIT COURT OF APPEALS
NINTH CIRCUIT.

OCTOBER TERM, 1891.

No. 16.

STANDARD OIL COMPANY OF IOWA, APPELLANT,

vs.

SOUTHERN PACIFIC COMPANY ET ALS.

APPEAL FROM CIRCUIT COURT OF THE UNITED STATES FOR THE
NORTHERN DISTRICT OF CALIFORNIA.

FILED DECEMBER 29, 1891.

UNITED STATES CIRCUIT COURT OF APPEALS
FOR THE NINTH CIRCUIT.

STANDARD OIL COMPANY OF IOWA,

APPELLANT,

vs.

SOUTHERN PACIFIC COMPANY ET AL.,

APPELLEES.

TRANSCRIPT ON APPEAL.

INDEX.

	Original.	Print.
Answer to Bill of Complaint.....	10	5
Answer to Petition for Interpleader.....	22	12
Amended Bill of Complaint.....	25	13
Answer of S. P. Co. to Second Amended Bill of Complaint.....	40	22
Answer Whittier, Fuller & Co. to Second Amended Bill.....	47	26
Assignment of Errors.....	227	163
Bill of Complaint.....	1	1
Bill of Revivor.....	53	30
Bond on Appeal.....	230	165
Certificate to Enrollment.....	71	40
Caption to Depositions.....	72	40
Caption to Depositions.....	90	55
Certificate to Depositions.....	85	48
Certificate to Depositions.....	202	124
Complainant's Exhibit "A".....	87	50
Complainant's Exhibit "A".....	203	127
Complainant's Exhibit "B".....	89	54
Complainant's Exhibit "B".....	204	130
Complainant's Exhibit "C".....	205	130
Complainant's Exhibit "E".....	206	131
Complainant's Exhibit "F".....	208	132
Complainant's Exhibit "G".....	212	134
Complainant's Exhibit "H".....	215	135
Demurrer to Petition for Interpleader.....	14	7
Demurrer Whittier, Fuller & Co. to Second Amended Bill.....	37	20
Decree.....	68	38
Deposition of Charles A. Watson.....	73	40
Deposition of Charles A. Watson.....	82	47
Deposition of Charles A. Watson.....	116	71
Deposition of George W. Ueffinger.....	79	45

	Original.	Print.
Deposition of George W. Ueffinger.....	91	55
Deposition of George W. Ueffinger.....	163	100
Deposition of George W. Ueffinger.....	200	123
Deposition of Lewis Peterson.....	112	69
Deposition of Lewis Peterson.....	199	122
Deposition of Frederick M. Woods.....	158	97
Deposition of Frederick M. Woods.....	177	109
Enrollment.....	66	37
Memorandum of Costs and Disbursements.....	69	38
Order making Whittier, Fuller & Co. parties respondent.....	24	13
Order Overruling Demurrer of Whittier, Fuller & Co.....	46	25
Order of Revivor.....	63	35
Order Allowing Appeal.....	229	164
Order Allowing Withdrawal of Original Exhibits.....	233	167
Petition for Interpleader.....	14	7
Petition for Order Allowing Appeal.....	226	162
Replication to Answer of S. P. Co.....	45	25
Replication to Answer of Whittier, Fuller & Co.....	52	29
Respondents' Exhibit "2".....	219	139
Respondents' Exhibit "3".....	220	143
Respondents' Exhibit "4".....	221	147
Respondents' Exhibit "5".....	222	151
Respondents' Exhibit "6".....	223	155
Respondents' Exhibit "7".....	224	159
Respondents' Exhibit "8".....	225	161
Subpœna <i>ad respondendum</i> on Original Bill.....	8	4
Second Amended Bill of Complaint.....	31	17
Subpœna <i>ad respondendum</i> on Bill of Revivor.....	60	34

Bill of Complaint.

To the Honorable, the Justices of the Circuit Court of the United States for the Ninth Circuit, within and for the Northern District of California, sitting in Equity:

The Standard Oil Company of Iowa, a corporation created and existing under and by virtue of the laws of the State of Iowa, brings this, its Bill, against the Southern Pacific Company, a corporation created and existing under and by virtue of the laws of the State of Kentucky. And thereupon your orator complains and says: That heretofore, to wit, before the seventeenth day of June, in the year one thousand eight hundred and seventy-nine, M. Campbell Brown, of Cleveland, Ohio, was the original and first inventor of a certain new and useful invention in Railroad Freight Cars. That the same was a new and useful invention and consisted generally of so constructing the bodies of freight cars that they could be used for the transporting of oils and liquids in one direction and for the transportation of ordinary merchandise on return trips in the opposite direction.

The said improvement consisted generally of dividing the car body into compartments and fitting into a part of such compartments tanks suitable for holding and safely transporting oils and liquids, and at the same time so constructing the remainder of the car body as to make it suitable for carrying ordinary merchandise.

2 That the same was not known or used by others before the invention thereof, as aforesaid, by the said M. Campbell Brown, and at the time of his application for a patent therefor had not been in public use or on sale for two years, nor abandoned, nor was it proved to have been abandoned. That the said M. Campbell Brown, being so as aforesaid the inventor thereof, on the seventeenth day of June, A. D. 1879, upon due application therefor, did obtain the letters patent of the United States for the said invention, granting and securing to him, for the full term of seventeen years from the last-named date the full and exclusive right and liberty of making, constructing, using and vending to others to be used the said invention and improvement throughout the United States and the Territories thereof. Said letters patent were issued in due form of law, under the seal of the Patent Office of the United States, and were signed by the Secretary of the Interior and countersigned by the Commissioner of Patents of the United States, and bore date the day and year last aforesaid, a description whereof, and of said invention, more fully appears in said letters patent, which said letters patent are in due form of law and are ready in Court to be produced by the complainant, or a duly authenticated copy thereof. And your orator further

3 shows that by a regular chain of assignment, made in writing, and recorded in the United States Patent Office, all the property in said letters patent, and all rights and liberties by them conferred, had been granted and conveyed by and from the said M. Campbell Brown to your orator on or prior to the first day of July, 1885. And your orator says that it is still the owner and holder of the said letters patent, and of the rights, privileges and liberties by them granted.

That prior to the issuing of said letters patent, all proceedings were had and taken which were required by law to be had or taken previous to the issuance of letters patent, granting special rights and liberties for new and useful inventions. And your orator further shows unto your Honors, that always since the grant of said letters patent, in the exercise of the full and exclusive right and liberty so granted as aforesaid, the respective owners thereof have made, constructed, used and vended to others to be used, the said improvement so patented, and have had and maintained, until the infringement hereinafter complained of, possession of the said improvement and invention under and by virtue of said letters patent, and have never acquiesced in any invasion or infringement of their said rights. And your orator further shows unto your Honors, that since your orator became the owner of said letters patent as aforesaid, and before the filing of this bill of complaint, the respondent herein, the Southern Pacific Company having full knowledge of the premises, and in violation of your orator's exclusive right, liberty and privilege as aforesaid, and
4 utterly disregarding the same, and without the license of your orator, or any license under said letters patent, and in the said Northern District of the State of California and elsewhere in the United States along various lines of railroads of which it has the exclusive use and control, has used the said invention and many cars into each one of which the said invention was incorporated; and it still continues to use many cars embracing the improvement and invention described in said letters patent, and so secured to your orator, how many, your orator is unable to say, but prays that the respondent may discover and set forth in its answer to this bill. And your orator alleges that the said cars so used by the respondent are infringements of said letters patent and were made according to the invention therein described and thereby protected, and secured to your orator as aforesaid, and contrary to law and the form of the statutes of the United States in such cases made and provided. And your orator shows that it is informed, and believes and so states to be true, that the respondent in this action intends to continue to infringe upon said letters patent, and to unlawfully use said invention as it has already been do-

ing. Your orator further shows that it has requested the respondent to desist from the use of said invention and to account to your orator for the damages which it has sustained, but that the respondent refuses either to so desist or account.

And your orator further shows unto your Honors, that it will be subject to great and irreparable injury, unless it shall obtain from your Honors the relief hereby sought.

Wherefore your orator prays that the said respondent may answer the premises, and may be decreed to account for and pay over to your orator all such gains and profits as has accrued to it from making or using or selling railroad cars containing the said invention. Your orator waives an answer under oath herein. And your orator further prays this Honorable Court to assess, or cause to be assessed, the damages which the complainant has sustained by reason of the premises and the infringements herein complained of; and that said damages, when so assessed, may be increased to an amount not exceeding three times the sum at which they shall be assessed, and that the respondent, the Southern Pacific Company, be adjudged and decreed to pay to your orator the damages so assessed, and also the amount to which they may be increased, in addition to the gains and profits above prayed for. And your orator further prays that the respondent herein, the Southern Pacific Company, may be restrained, by an injunction issuing out of this Honorable Court, from making, using, or vending to others to be used, or transferring in any way, any railroad cars embracing the improvements aforesaid, so secured to your orator as aforesaid; and that the railroad cars containing said invention manufactured or purchased, or in any manner obtained by and now in possession of said respondent may be destroyed or delivered up to your orator; and for such other and further relief as the nature of the case may require, and to your Honors may seem meet.

May it please your Honors to grant unto your orator not only a writ of injunction conformable to the prayer of this bill, but also the writ of subpoena directed to the said respondent, the Southern Pacific Company, commanding it to appear and answer this bill of complaint, and to do and receive what to your Honors shall seem meet. And your orator will ever pray, etc.

PILLSBURY & BLANDING,

Solicitors for Complainant.

E. S. PILLSBURY,

Of Counsel for Complainant.

STATE OF CALIFORNIA,

City and County of San Francisco, } ss.

E. A. Tilford, being duly sworn, does depose and say, that he is the President of the Standard Oil Company of Iowa, which is

the complainant in the foregoing bill of complaint, and that by means of his said office he has acquired and possesses particular knowledge of the matters stated therein; that he has read the foregoing bill of complaint and knows the contents thereof, and that the same is true of his own knowledge, except as to the matters therein stated on information and belief, and as to those matters he verily believes it to be true.

E. A. TILFORD.

Subscribed and sworn to before me this 29th day of October, A. D. 1889.

[SEAL.]

JAMES L. KING,
Notary Public.

7 (Endorsed:) Filed 4th day of November, A. D. 1889.
L. S. B. Sawyer, Clerk.

8 *Subpoena ad respondendum.*

UNITED STATES OF AMERICA:

Circuit Court of the United States, Ninth Judicial Circuit,
Northern District of California. In Equity.

The President of the United States of America, Greeting: To Southern Pacific Company, a corporation, created and existing under and by virtue of the laws of the State of Kentucky:

You are hereby commanded, That you be and appear in said Circuit Court of the United States aforesaid, at the court room in San Francisco, on the second day of December, A. D. 1889, to answer a Bill of Complaint, exhibited against you in said Court by the Standard Oil Company of Iowa, a corporation created and existing under and by virtue of the laws of the State of Iowa, and to do and receive what the said Court shall have considered in that behalf. And this you are not to omit, under the penalty of five thousand dollars.

Witness, the Honorable Melville W. Fuller, Chief Justice of the Supreme Court of the United States, this 4th day of November, in the year of our Lord one thousand eight hundred and eighty-nine and of our Independence the 114th.

[SEAL.]

L. S. B. SAWYER, *Clerk.*

Memorandum Pursuant to Rule 12, Supreme Court, U. S.

You are hereby required to enter your appearance in the above suit, on or before the first Monday of December next, at the Clerk's Office of said Court, pursuant to said bill, otherwise the said bill will be taken *pro confesso.*

L. S. B. SAWYER, *Clerk.*

9

UNITED STATES MARSHAL'S OFFICE,
NORTHERN DISTRICT OF CALIFORNIA.

I hereby certify that I received the within writ on the 5th day of November, 1889, and personally served the same on the 5th day of November, 1889, upon Southern Pacific Company by delivering to and leaving with Richard Gray, General Freight Agent, an officer of said Southern Pacific Company, said defendant named therein personally, at the City and County of San Francisco in said District, an attested copy thereof, and at the same time and place served upon Southern Pacific Company, defendant herein, a certified copy of order to show cause and injunction and also certified copy of bill of complaint by leaving with and delivering to said Richard Gray, Freight Agent, etc., as aforesaid of said Southern Pacific Company defendant herein, said certified copy order to show cause and injunction and said certified copy bill of complaint.

San Francisco, Nov. 8th, 1889.

J. C. FRANKS,
U. S. Marshal.

By L. B. HOPKINS, *Deputy.*

(Endorsed:) Filed November 9, 1889. L. S. B. Sawyer,
Clerk. By F. D. Monckton, Deputy Clerk.

10

Answer.

In the United States Circuit Court, Ninth Circuit, Northern
District of California,

STANDARD OIL COMPANY, of Iowa, Complainant, }
vs. } No. 10575.
SOUTHERN PACIFIC COMPANY, Defendant. }

The above named defendant, appearing in said action, and answering the bill of complaint filed by the above named complainant,

I. States that it has no information or belief sufficient to enable it to either admit or deny the allegation in said bill of complaint contained, to wit: that before the 17th day of June, 1879, M. Campbell Brown, of Cleveland, Ohio, was the original and first inventor of a certain new or useful invention in railroad freight cars, or that the same was a new or useful invention, and therefore denies the same.

II. Admits that the improvement or device claimed to have been invented by said M. Campbell Brown is as described on page one of complainant's bill of complaint;

III. States that it has no information or belief sufficient to enable it to either admit or deny the allegation in said bill of complaint contained, to wit: that said improvement or device was not known or used by others before the invention thereof

by said M. Campbell Brown, or that, at the time of his application for a patent therefor had not been in public use or on sale for two years, or abandoned, and therefore denies the same;

11 IV. Admits that letters patent of the United States were issued to said M. Campbell Brown, as alleged in said bill of complaint, and admits that the complainant herein is the owner thereof, together with all rights and liberties by them conferred, as alleged in said bill of complaint;

V. Admits that it received and transported two certain cars constructed for the carriage of oil in bulk in one direction, and for the transportation of ordinary merchandise on return trips in the other direction, but avers that when it received said cars at its terminal station from its connecting road, it was ignorant of the nature or internal structure of said cars, and was not aware that said cars were so constructed as to infringe upon the patent or patent rights granted to said M. Campbell Brown, or upon any other patent or patent rights;

VI. Avers that no more than two such cars have been tendered to or received by defendant from any person or persons other than the complainant herein;

VII. Admits that complainant has requested the defendant to desist from the use of said invention, and to account to it for damages sustained; avers that it has not, since receiving said request, received, used or transported any of such cars for itself or for any person or persons other than complainant; denies that by reason of any willful or unlawful act of defendant the complainant has been injured or damaged;

12 VIII. Avers that it does not now and never did own any of the cars alleged by complainant to be an infringement upon complainant's patent, and that it does not now and never did own any interest therein; avers that it has not in its possession or under its control any such cars.

And for a further, separate and distinct answer and defense, defendant avers that it is a common carrier for hire; that as such it is accustomed to receive and transport over its railroad, cars belonging to other corporations and individuals; that under the laws of the United States it is required to receive all cars, without discrimination, and transport the same; that it has not the means for discovering or ascertaining whether cars offered to it for transportation are infringements on patent rights or not; that immediately upon receipt of notice from complainant this defendant notified the owners of said cars complained of that it had received such notice, and that it would transport no more of such cars unless secured against all losses and damages by said owners; that said security has not been given, and that defendant has neither received nor transported any of such cars since the date of complainant's notice.

Wherefore, defendant asks the judgment of the Court in the premises.

FRANK SHAY,
Solicitor for Defendant.

13 STATE OF CALIFORNIA, }
City and County of San Francisco, } ss.

G. L. Lansing, being duly sworn, deposes and says that he is the Secretary of the Southern Pacific Company, defendant in the above entitled action; that he has read the foregoing answer and knows the contents thereof, and that the same is true of his own knowledge, except as to the matters which are therein stated on his information or belief, and as to those matters that he believes it to be true.

G. L. LANSING.

Subscribed and sworn to before me this 2d day of December, 1889.

E. B. RYAN,
Notary Public.

[SEAL.]

(Endorsed:) Service of a copy of the within answer is hereby admitted this 2d day of December, A. D. 1889. Pillsbury & Blanding, Solicitors for Plaintiff. Filed December 2, 1889. L. S. B. Sawyer, Clerk.

14 *Petition for Interpleader.*

In the Circuit Court of the United States, in and for the Northern District of California.

THE STANDARD OIL COMPANY (a Corporation),
Complainant, }
vs. }
THE SOUTHERN PACIFIC COMPANY (a Corporation),
Defendant. }

To the Honorable the Justices of the United States Circuit Court in and for the Ninth Circuit, in the Northern District of California.

The petition of Whittier, Fuller & Co., a firm composed of William F. Whittier, William P. Fuller, Frederick N. Woods and William P. Fuller, Jr., doing business in the City and County of San Francisco, State of California, respectfully presents to your Honors:

That said firm of Whittier, Fuller & Co., is now and has been for about thirty years last past engaged in conducting and carrying on a large wholesale and retail business in paints and oils in the City and County of San Francisco, State aforesaid. That the magnitude of its business renders it necessary for

said firm to ship into this State from the Eastern States large quantities of petroleum and other oils. That in order to make such shipments and to supply its said trade with oils your petitioners have had constructed at a large expense several cars which are especially adapted for containing, storing and transporting petroleum and other oils in bulk. That its custom has been to have said cars filled with oils in the Eastern States and the cars so filled were delivered as freight to one of the trans-continental lines of railway, to be transported and delivered in San Francisco. That during the month of October, 1889, your petitioner was notified by The Standard Oil Company, an eastern corporation, that it claimed that your petitioner's said cars were an infringement upon a certain United States letters patent which was issued to one M. Campbell Brown on the 17th day of June, 1879, and which said Standard Oil Company claimed had been assigned to and was the property of said corporation. That your petitioner immediately took legal advice in the matter and was advised after careful investigation by competent authority that no infringement upon said letters patent existed. That on the 2d day of December, 1889, your petitioner was notified that two of its said oil cars had been delivered by the Atchison, Topeka and Santa Fe Railroad Company at Mojave, in the State of California, to the Southern Pacific Company for carriage to San Francisco, California, but that said Southern Pacific Company refused to haul or deliver said cars. That in the course of correspondence with the officials of said Southern Pacific Company your petitioner learned that an action in Equity had been commenced in this Court by said Standard Oil Company against Southern Pacific Company for infringing upon the said letters patent issued to said M. Campbell Brown and claimed to be owned by said Standard Oil Company. That this was the first information your petitioner had of the existence of such suit. Your petitioner then ordered its attorney, John L. Boone, Esq., to investigate said matter. We are informed by our said attorney that such a suit was instituted and is now in progress in this Court, being Equity Case, No. 10,575. That an order to show cause why an injunction should not issue against said Southern Pacific Company was filed in said proceeding. That the said Southern Pacific Company filed its answer in said cause on the day of 1889. That the Examiner of this Court, S. C. Houghton, Esq., being ill the attorneys for said parties applied to the Judge of this Court and obtained an order appointing A. L. Coombs, Short-hand Reporter, a Special Examiner to take the testimony in said cause, and thereafter, to wit: on the 26th day of November, 1889, said parties appeared before said A. L. Coombs, Special Examiner, and certain testimony was taken, sealed up

and filed in said cause, and said cause appears now to be ready for hearing. Your petitioner further represents to your Honors that said defendant, the Southern Pacific Company, has not now, and never has had any interest whatever in said cars further than to haul them from place to place in the capacity of a common carrier. That said cars belong to and are the property of your petitioner. That your petitioner is fearful that the said suit now pending above referred to is a collusive suit between said complainant and respondent, and that it is the intention of said parties to collusively obtain a decree of this Honorable Court adjudging and declaring your petitioner's
 17 said cars to be an infringement upon said letters patent issued to said Brown and claimed as being the property of said Standard Oil Company without permitting your petitioner to defend its rights in the premises.

That your petitioner is ready, able and willing to defend its right to make, use and maintain said cars. Your petitioner is desirous of making answer to the complaint filed herein and to produce proof on the issues made in said case. That unless your petitioner be granted the privilege of interpleading in said suit it is liable to suffer irreparable damage and loss and will be deprived of the use of its property without being permitted to make any defense in said action whatever. Wherefore your petitioner prays that said cause be opened and that your petitioner be permitted to interplead in said action, by filing an answer to the matters set forth and charged against said cars in the Bill of Complaint herein, and that it be permitted to produce proof in support of the matters it may set forth in its said answer.

STATE OF CALIFORNIA,)
 City and County of San Francisco.) ss.

FREDERICK N. WOODS, being duly sworn, deposes and says: That he is a member of the firm of Whittier, Fuller & Co., the petitioner named in the above petition; that he has heard read the foregoing petition and knows the contents thereof; that the same is true of his own knowledge, except as to those matters which are therein stated on his information or belief, and as to those matters that he believes it to be true.

FREDERICK N. WOODS.

Subscribed and sworn to before me this 5th day of December, 1889.

[SEAL.]

LEWIS B. HARRIS,
Notary Public.

(Endorsed:) Filed December 5, 1889. L. S. B. Sawyer, Clerk.

Demurrer to Petition for Interpleader.

In the Circuit Court of the United States, for the Northern District of California, in the Ninth Circuit.

THE STANDARD OIL COMPANY, of Iowa (a Corporation),	}
Complainant,	
<i>vs.</i>	
THE SOUTHERN PACIFIC COMPANY (a Corporation),	}
Defendant.	

The demurrer of the Standard Oil Co., of Iowa, the above named complainant, to the petition of Whittier, Fuller & Co., a firm composed of William F. Whittier, William P. Fuller, Frederick N. Woods, and William P. Fuller, Jr., praying that this cause be opened and that petitioners be permitted to interplead therein.

The Standard Oil Co., of Iowa, the above named complainant, not confessing or acknowledging all or any of the matters and things in the said petition for an interpleader contained to be true, in the manner and form therein set forth, and alleged and reserving unto itself and praying this Honorable Court to grant to it, the said complainant, the right of making and asserting any other and further defense to said petition, and to the whole thereof, consistent with equity and good conscience, does demur to the said petition, and to the whole thereof, and separately to the several parts thereof, and for causes of demurrer to the whole of said petition assigns and shows:

I. That the said petitioners have not in and by their said petition, made or stated such a case as entitles them or any of them to any relief whatsoever against the complainant, or defendant herein, as to the matters contained in said petition, or as to any of such matters.

19 II. That said petition does not state facts, or any fact sufficient to constitute a or any cause of action or interpleader, or a or any grounds of suit on behalf of said petitioners against either the complainant or the defendant herein, or to entitle said petitioners or any of them to any judgment, decree, discovery or relief whatsoever in this case;

III. That said petitioners have no interest whatsoever in the matter in litigation in this action, nor in the success of either of the parties thereto, nor any interest whatsoever against said parties or either of them;

IV. That by said petition the said petitioners ask to be allowed to interplead in this action, and that there is no such remedy known to or administered by any Court of Chancery, as an interpleader in a pending action by third persons, not parties thereto.

V. That this is an action *in personam* by the complainant against the defendant, and that the petitioners have no interest

therein, and are not in any way affected thereby, and have no right to interplead or intervene therein:

VI. That, as appears by the papers, orders, minutes and proceedings on file, or of record in this action, that the same has been already tried, and the testimony therein taken and completed, and the cause is ready for submission and decision, and that it is too late for petitioners now to seek to interplead or intervene in this action, and that petitioners have lost any right which they might otherwise have to intervene or interplead herein by their *laches*, neglect and delay.

VII. That said petition neither states nor shows any
20 cause whatsoever of interpleader or intervention.

VIII. That it is not averred or pretended in said petition, that the alleged refusal of said Southern Pacific Company to haul or deliver the said cars, claimed by petitioners, was based upon or in any way caused by this action or the injunction therein, nor is it anywhere stated in said petition, nor does it anywhere appear therefrom, but that the said Southern Pacific Company would still refuse to haul or deliver said cars of petitioners, even though this action were dismissed or the injunction therein dissolved;

IX. That if the said Southern Pacific Company has refused to haul or deliver any cars for petitioners, said petitioners have a plain, speedy and adequate remedy at law against said Southern Pacific Company for and on account of such refusal;

X. That the defendant, the Southern Pacific Company, is under no obligation whatsoever to haul or deliver any car or cars constructed, owned or controlled by the petitioners, or any cars specially constructed for the purpose of containing, storing or transporting petroleum or any other oils or substances in bulk or otherwise or at all. And that the said Southern Pacific Company is under no obligation or duty whatsoever to haul any cars other than those constructed or owned by itself, and that, even if the complainant were defeated in this action, and the injunction therein dissolved, the said Southern Pacific Company might still lawfully refuse to haul or deliver any of
the cars mentioned by petitioners in said petition.

21 Wherefore, and for diverse other defects and good causes of demurrer, appearing in the said petition, this complainant does demur thereto and to the several parts thereof, and humbly demands the judgment of this Honorable Court, whether it shall be compelled to make any answer or further defense to the said petition or to any part thereof; and complainant prays to be hence dismissed with its reasonable costs and charges in this behalf sustained.

PILLSBURY & BLANDING,

Solicitors for the Complainant.

E. S. PILLSBURY,

Of Counsel for said Complainant.

Gordon Blanding, one of the solicitors for the above-named complainant, hereby certifies and declares that, in his opinion, the above and foregoing demurrer is well founded in point of law.

GORDON BLANDING,
Solicitor for Complainant.

(Endorsed:) Service of within demurrer admitted this 9th day of December, 1889. John L. Boone, Sol. for Whittier, Fuller & Co. Filed Dec. 9, 1889. L. S. B. Sawyer Clerk.

22 *Answer to Petition for Interpleader.*

In the Circuit Court of the United States, in and for the Northern District of California.

THE STANDARD OIL COMPANY, Complainant,
vs.
THE SOUTHERN PACIFIC COMPANY, Defendant. } No. 10,575.

Now comes the Southern Pacific Company, defendant herein, and answering the petition of Whittier, Fuller and Company to interplead herein, avers:

I. That it is true, as alleged by petitioners, that defendant has no interest in the patent in question or in the cars of either the Standard Oil Company or of petitioners, as fully appears by its answer made in this case.

II. That defendant would be and is liable for damages for infringement of plaintiff's patent, even though it had no interest in the cars of petitioners, for hauling or doing business with such cars.

III. That petitioners had due and ample notice of plaintiff's claim of infringement, served upon defendant; that said claim was based upon its hauling the cars in question and that action was threatened against defendant.

IV. That the fears of the petitioners that this suit is collusive are entirely unfounded, for the reason that a judgment against defendant in this suit could in no event affect or bind petitioners, unless they did interplead or were brought into the case as parties to it.

V. That defendant hereby consents that petitioners may defend this suit in their own names, with their own
23 counsel and at their own expense, and that the prayer of petitioners to interplead may be granted, if such proceeding is proper.

FRANK SHAY,
Solicitor for Defendant.

(Endorsed:) Service admitted Dec. 7, 1889. J. L. Boone, solicitor for Whittier, Fuller & Co. Filed December 9, 1889. L. S. B. Sawyer, Clerk. By F. D. Monckton, Dep'y. Clerk.

24 *Order making Whittier, Fuller & Co. parties respondent.*

At a stated term, to wit: the November term, A. D. 1889, of the Circuit Court of the United States of America, of the Ninth Judicial Circuit, in and for the Northern District of California, held at the court room in the City and County of San Francisco, on Monday, the 9th day of December in the year of our Lord one thousand eight hundred and eighty-nine.

Present: The Honorable Lorenzo Sawyer, Circuit Judge; the Honorable George M. Sabin, U. S. District Judge, District of Nevada.

THE STANDARD OIL COMPANY, of Iowa,)
vs.) No. 10,575.
 THE SOUTHERN PACIFIC COMPANY.)

This cause coming on to be heard this day upon the order to show cause why the prayer of the petition of Whittier, Fuller & Company for permission to interplead herein should not be granted, John L. Boone, Esq., appeared for said order to show cause, and Gordan Blanding, Esq., for complainant and the demurrer to said petition, and was argued by the respective counsel, and submitted to the Court for consideration and decision. And the same having been duly considered, it is ordered that complainant within ten days file an amended bill of complaint herein making said Whittier, Fuller & Company parties respondent, and that complainant thereupon file a bond in the sum of twenty thousand dollars to indemnify the respondents or either of them for all damages they or either of them may sustain by action of the preliminary injunction granted herein. This order is without prejudice to the injunction heretofore granted herein.

25 *Amended Bill of Complaint.*

To the Honorable the Justices of the Circuit Court of the United States for the Circuit, within and for the Northern District of California, sitting in Equity.

The "Standard Oil Company," of Iowa, a corporation created and existing under and by virtue of the laws of the State of Iowa, brings this its bill against the Southern Pacific Company, a corporation created and existing under and by virtue of the laws of the State of Kentucky, and William F. Whittier, William P. Fuller, Frederick N. Woods and William P. Fuller, Junr., doing business in the City and County of San Francisco, State of California, under the firm name of "Whittier, Fuller & Co."

And thereupon your orator complains and says, that heretofore, to wit: before the seventeenth day of June, in the year one thousand eight hundred and seventy-nine, M. Campbell Brown,

of Cleveland, Ohio, was the original and first inventor of a certain new and useful invention in railroad freight cars. That the same was a new and useful invention and consisted generally of so constructing the bodies of freight cars that they could be used for the transporting of oils and liquids in one direction and for the transportation of ordinary merchandise on return trips in the opposite direction. The said improvement consisted generally of dividing the car-body into compartments and fitting into a part of such compartments, tanks suitable for holding and safely transporting oils and liquids, and at the same time so constructing the remainder of the car-body as to make it suitable for carrying ordinary merchandise.

26 That the same was not known or used by others before the invention thereof as aforesaid by the said M. Campbell Brown, and at the time of his application for a patent therefor, had not been in public use or on sale for two years, nor abandoned, nor was it proved to have been abandoned. That the said M. Campbell Brown being so as aforesaid the inventor thereof, on the seventeenth day of June, A. D. 1879, upon due application therefor, did obtain the letters patent of the United States, for the said invention, granting and securing to him for the full term of seventeen years from the last named date, the full and exclusive right and liberty of making, constructing, using and vending to others to be used, the said invention and improvement throughout the United States and the Territories thereof. Said letters patent were issued in due form of law under the seal of the Patent Office of the United States, and were signed by the Secretary of the Interior and countersigned by the Commissioner of Patents, of the United States, and bore date the day and year last aforesaid, a description whereof, and of said invention, more fully appears in said letters patent, which said letters patent are in due form of law, and are ready in Court to be produced by the complainant, or a duly authenticated copy thereof. And your orator further shows, that by a regular chain of assignment, made in writing, and recorded in the United States Patent Office, all the property in said letters patent, and all rights and liberties by them conferred, had been granted and conveyed by and from the said M. Campbell Brown to your orator on or prior to the first day of July, 1885.

27 And your orator says that it is still the owner and holder of the said letters patent, and of the rights, privileges and liberties by them granted. That prior to the issuing of said letters patent, all proceedings were had and taken which were required by law to be had or taken previous to the issuance of letters patent, granting special rights and liberties for new and useful inventions. And your orator further shows unto your Honors, that always since the grant of said letters

patent, in the exercise of the full and exclusive right and liberty so granted as aforesaid, the respective owners thereof have made, constructed, used and vended to others to be used, the said improvement so patented, and have had and maintained, until the infringement hereinafter complained of possession of the said improvement and invention under and by virtue of said letters patent, and have never acquiesced in any invasion or infringement of their said rights. And your orator further shows unto your Honors, that since your orator became the owner of said letters patent as aforesaid, and before the filing of the bill of complaint, the respondent herein, the Southern Pacific Company, having full knowledge of the premises, and in violation of your orator's exclusive right, liberty and privilege as aforesaid, and utterly disregarding the same, and without the license of your orator, or any license under said letters patent, and in the said Northern District of the State of California and elsewhere in the United States along various lines of railroads of which it has the exclusive use and control, has used the said invention and many cars into each one of which the said invention was incorporated; and it still continues to use many cars embracing the improvement and invention described in said letters patent, and so secured to your orator, how many, your orator is unable to say, but pray that the respondent may discover and set forth in its answer to this bill. And your orator alleges that the said cars so used by the respondent are infringements of said letters patent, and were made according to the invention therein described and thereby protected, and secured to your orator as aforesaid, and contrary to law and the form of the statutes of the United States in such cases made and provided. And your orator shows that it is informed and believes, and so states to be true, that the respondent in this action intends to continue to infringe upon said letters patent, and to unlawfully use said invention, as it has already been doing. Your orator further shows that it has requested the respondent to desist from the use of said invention and to account to your orator for the damages which it has sustained, but that the respondent refuses either to so desist or account. And your orator further shows unto your Honors, that it will be subject to great and irreparable injury unless it shall obtain from your Honors the relief hereby sought. And your orator further shows unto your Honors that the respondents herein, other than said Southern Pacific Company, claim to have some interest in this action, whereof your orator is not advised.

Wherefore, your orator prays that the said respondent; the Southern Pacific Company, may answer the premises, and may be decreed to account for and pay over to your orator all such gains and profits as has accrued to it from

making or using or selling railroad cars containing the said invention. Your orator waives an answer under oath herein. And your orator further prays this Honorable Court to assess, or cause to be assessed, the damages which the complainant has sustained by reason of the premises and the infringements herein complained of; and that said damages, when so assessed, may be increased to an amount not exceeding three times the sum at which they shall be assessed; and that the respondent, the Southern Pacific Company, be adjudged and decreed to pay to your orator the damages so assessed, and also the amount to which they may be increased, in addition to the gains and profits above prayed for. And your orator further prays that the respondent herein, the Southern Pacific Company, may be restrained, by an injunction issuing out of this Honorable Court, from making, using or vending to others to be used, or transferring in any way any railroad cars embracing the improvements aforesaid, so secured to your orator as aforesaid; and that the railroad cars containing said invention, manufactured or purchased, or in any manner obtained by and now in possession of said respondent, may be destroyed or delivered up to your orator; and for such other and further relief as the nature of the case may require and to your Honors may seem meet. May it please your Honors to grant unto your orator not only a writ of injunction conformable to the prayer of this bill, but also the writ of subpœna directed to the said respondent, the Southern Pacific Company, commanding

30 it to appear and answer this bill of complaint, and to do and receive what to your Honors shall seem meet. And your orator will ever pray, etc.

PILLSBURY & BLANDING,
Solicitors for Complainant.

E. S. PILLSBURY,
Of Counsel for Complainant.

STATE OF CALIFORNIA, {
City and County of San Francisco, } ss.

E. A. Tilford, being duly sworn, does depose and say that he is the President of the Standard Oil Company of Iowa, which is the complainant in the foregoing Bill of Complaint, and that by means of his said office he has acquired and possesses particular knowledge of the matters stated therein; that he has read the foregoing Bill of Complaint and knows the contents thereof, and that the same is true of his own knowledge, except as to the matters therein stated on information and belief, and as to those matters he verily believes it to be true.

E. A. TILFORD.

Subscribed and sworn to before me this 18th day of December, A. D. 1889.

[SEAL.]

JAMES L. KING,
Notary Public.

(Endorsed:) Service of a copy of the within amended Bill of Complaint admitted this 19th day of December, 1889. Frank Shay, Atty. for Southern Pacific Company. John L. Boone, attorney for Whittier, Fuller & Co. Filed 19th day of December, A. D. 1889. L. S. B. Sawyer, Clerk.

31 *Second Amended Bill of Complaint.*

To the Honorable the Justices of the Circuit Court of the United States for the Circuit, within and for the Northern District of California, sitting in Equity:

The "Standard Oil Company" of Iowa, a corporation created and existing under and by virtue of the laws of the State of Iowa, brings this its bill against the Southern Pacific Company, a corporation created and existing under and by virtue of the laws of the State of Kentucky, and William F. Whittier, William P. Fuller, Frederick N. Woods and William P. Fuller, Junr., as co-partners, doing business in the City and County of San Francisco, State of California, under the firm name of "Whittier, Fuller & Co." And thereupon your orator complains and says: That heretofore, to wit: before the seventeenth day of June, in the year one thousand eight hundred and seventy-nine, M. Campbell Brown, of Cleveland, Ohio, was the original and first inventor of a certain new and useful invention in railroad freight cars. That the same was a new and useful invention and consisted generally of so constructing the bodies of freight cars that they could be used for the transporting of oils and liquids in one direction, and for the transportation of ordinary merchandise on return trips in the opposite direction. The said improvement consisted generally of dividing the car body into compartments and fitting into a part of such compartments tanks suitable for holding and safely transporting oils and liquids, and at the same time so constructing the remainder of the car body as to make it suitable for carrying ordinary merchandise. That the same was not known or

32 used by others before the invention thereof as aforesaid by the said M. Campbell Brown, and at the time of his application for a patent therefor had not been in public use or on sale for two years, nor abandoned, nor was it proved to have been abandoned. That the said M. Campbell Brown being so as aforesaid the inventor thereof, on the seventeenth day of June, A. D. 1879, upon due application therefor, did obtain the letters patent of the United States for the said invention, granting and securing to him for the full term of sev-

enteen years from the last named date the full and exclusive right and liberty of making, constructing, using and vending to others to be used, the said invention and improvement throughout the United States and the Territories thereof. Said letters patent were issued in due form of law under the seal of the Patent Office of the United States, and were signed by the Secretary of the Interior, and countersigned by the Commissioner of Patents of the United States, and bore date the day and year last aforesaid, a description whereof, and of said invention, more fully appears in said letters patent, which said letters patent are in due form of law, and are ready in Court to be produced by the complainant, or a duly authenticated copy thereof. And your orator further shows, that by a regular chain of assignment, made in writing, and recorded in the United States Patent Office, all the property in said letters patent, and all rights and liberties by them conferred, had been granted and conveyed by and from the said M. Campbell Brown to your orator on or prior to the first day of July, 1885. And

33 your orator says that it is still the owner and holder of the said letters patent, and of the rights, privileges and liberties by them granted. That prior to the issuing of said letters patent, all proceedings were had and taken which were required by law to be had or taken previous to the issuance of letters patent, granting special rights and liberties for new and useful inventions. And your orator further shows unto your Honors, that always, since the grant of said letters patent, in the exercise of the full and exclusive right and liberty so granted as aforesaid, the respective owners thereof have made, constructed, used and vended to others to be used, the said improvement so patented, and have had and maintained until the infringement hereinafter complained of, possession of the said improvement and invention under and by virtue of said letters patent, and have never acquiesced in any invasion or infringement of their said rights. And your orator further shows unto your Honors, that since your orator became the owner of said letters patent, as aforesaid, and before the filing of this bill of complaint, the respondents herein, having full knowledge of the premises, and in violation of your orator's exclusive right, liberty and privilege as aforesaid, and utterly disregarding the same, and without the license of your orator, or any license under said letters patent, and in the said Northern District of the State of California, and elsewhere in the United States along various lines of railroads, of which said respondent, the Southern Pacific Company, has the exclusive use and control, have used the said invention and divers and several

34 cars into each one of which the said invention was incorporated; and respondents still continue to use divers and several cars embracing the improvement and invention

described in said letters patent, and so secured to your orator, how many your orator is unable to say, but prays that the respondents may discover and set forth in their answers to this bill. And your orator alleges that the said cars so used by the respondents are infringements of said letters patent, and were made according to the invention therein described and thereby protected, and secured to your orator as aforesaid, and contrary to law and the form of the statutes of the United States in such cases made and provided. And your orator shows that it is informed, and believes and so states to be true, that the respondents in this action intend to continue to infringe upon said letters patent, and to unlawfully use said invention as they have already been doing. Your orator further shows that it has requested the respondents to desist from the use of said invention and to account to your orator for the damages which it has sustained, but that the respondents refuse either to so desist or account. And your orator further shows unto your Honors that it will be subject to great and irreparable injury, unless it shall obtain from your honors the relief hereby sought. And your orator further shows that the respondents herein, other than said Southern Pacific Company, claim to have some ownership and interest in said cars so used by respondents, the nature whereof your orator is not advised, and that your orator has made them respondents herein

35 in obedience to orders of this Honorable Court, made herein on 9th and 30th days of December, 1889. Wherefore your orator prays that the said respondents may answer the premises, and may be decreed to account for and pay over to your orator all such gains and profits as have accrued to them from making or using or selling railroad cars containing the said invention. Your orator waives an answer under oath herein. And your orator further prays this Honorable Court to assess, or cause to be assessed, the damages which the complainant has sustained by reason of the premises and the infringements herein complained of; and that said damages, when so assessed, may be increased to an amount not exceeding three times the sum at which they shall be assessed; and that the respondents be adjudged and decreed to pay to your orator the damages so assessed, and also the amount to which they may be increased, in addition to the gains and profits above prayed for. And your orator further prays that the respondents herein may be restrained, by an injunction issuing out of this Honorable Court, from making, using or vending to others to be used, or transferring in any way, any railroad cars embracing the improvements aforesaid, so secured to your orator as aforesaid; and that the railroad cars containing said invention manufactured or purchased, or in any manner obtained by and now in possession of said respondents, may be

destroyed or delivered up to your orator; and for such other
 and further relief as the nature of the case may require,
 36 and to your Honors may seem meet. May it please
 your Honors to grant unto your orator not only a writ of
 injunction conformable to the prayer of this bill, but also the
 writ of subpoena directed to the said respondents commanding
 them to appear and answer this bill of complaint, and to do
 and receive what to your Honors shall seem meet. And your
 orator will ever pray, etc.

PILLSBURY & BLANDING,
Solicitors for Complainant.

E. S. PILLSBURY,
Of Counsel for Complainant.

STATE OF CALIFORNIA,
City and County of San Francisco, } ss.

E. A. Tilford, being duly sworn, does depose and say that he
 is the President of the Standard Oil Company of Iowa, which is
 complainant in the foregoing Bill of Complaint, and that by
 means of his said office he has acquired and possesses particular
 knowledge of the matters stated therein; that he has read the
 foregoing Bill of Complaint and knows the contents thereof,
 and that the same is true of his own knowledge, except as to
 the matters therein stated on information and belief, and as to
 those matters he verily believes it to be true.

E. A. TILFORD.

Subscribed and sworn to before me this 3d day of January,
 A. D. 1890.

[SEAL.]

JAMES L. KING,
Notary Public.

(Endorsed:) Due service of within Bill of Complaint ad-
 mitted this 3d day of January, 1890. Frank Shay, attorney
 for the "Southern Pacific Co." John L. Boone, attorney for
 "Whittier, Fuller & Co." Filed 3d day of January, A. D.
 1890. L. S. B. Sawyer, Clerk.

37 *Demurrer of Whittier, Fuller & Co., to Second Amended
 Bill.*

In the Circuit Court of the United States in and for the North-
 ern District of California.

THE STANDARD OIL Co., Complainant, }
vs. }
 THE SOUTHERN PACIFIC Co. et al., Defendants. }

The demurrer of William F. Whittier, William P. Fuller,
 Frederick N. Woods and William P. Fuller, Jr., constituting

the firm of Whittier, Fuller & Co., respondents, to the bill of complaint of The Standard Oil Company, complainant.

These defendants, by protestation, not confessing or acknowledging all or any of the matters and things in said complainant's bill contained to be true, in such manner and form as the same are therein set forth, do demur thereto, and for cause of demurrer show—that the said complainant hath not in or by its said bill stated such a case as entitles it in a Court of Equity to any relief from said or either of said defendants. And for a further cause of demurrer these defendants show that the said complainant has not shown in and by its said bill any right on the part of said complainant to maintain any action against said defendants or either of them, on the other hand said bill of complaint does show affirmatively that complainant herein has no such right of action and that this Court has no jurisdiction thereof. And for a further cause of demurrer these defendants say that the said complaint does not describe, disclose or set forth any new or useful invention or discovery or
 38 any invention or discovery patentable under the patent laws of the United States, but on the contrary the description of the alleged invention contained in said complaint shows that the same is not patentable.

Wherefore, and for divers other causes of demurrer, appearing in the said bill, these defendants humbly demand the judgment of this Honorable Court whether they shall be compelled to make any further or other answer to the said bill, and pray to be hence dismissed with their reasonable costs in this behalf most wrongfully sustained.

Respectfully submitted,

JNO. L. BOONE,

Solicitor for Whittier, Fuller & Co., Respondents.

I hereby certify that in my opinion the foregoing demurrer of William F. Whittier, William P. Fuller, Frederick N. Woods and William P. Fuller, Jr., constituting the firm of Whittier, Fuller & Co., defendants to the bill of complaint of the Standard Oil Co., complainant, is well founded in point of law and proper to be filed in the above cause.

JNO. L. BOONE,

Solicitor for Whittier, Fuller & Co.

STATE OF CALIFORNIA,)

City and County of San Francisco.)

W. F. WHITTIER being duly sworn deposes and says, that he is a member of the firm of Whittier, Fuller & Co., defendants in the above entitled action; that he has read the foregoing demurrer to the second amended bill of complaint in this suit,

and that the same is not interposed for the purpose of delaying said suit or any proceedings therein.

W. F. WHITTIER.

Subscribed and sworn to before me this 6th day of January, A. D. 1890.

[SEAL.]

LEWIS B. HARRIS,
Notary Public.

39 (Endorsed:) Receipt of the within demurrer by copy, admitted this 6th day of January, 1890. Pillsbury & Blanding, Solicitors for Complainant. Filed January 6, 1890. L. S. B. Sawyer, Clerk. By F. D. Monekton, Deputy Clerk.

40 *Answer of S. P. Co. to Second Amended Bill.*

In the Circuit Court of the United States, Ninth Judicial Circuit, Northern District of California.

STANDARD OIL COMPANY OF IOWA, Complainant,

vs.

SOUTHERN PACIFIC COMPANY AND WILLIAM F. WHITTIER, WILLIAM P. FULLER, FREDERICK N. WOODS AND WILLIAM P. FULLER, JR., co-partners, doing business under the firm name of WHITTIER, FULLER & COMPANY, Defendants.

No. 10,575.

Now comes the Southern Pacific Company, one of the defendants above named, and answering the second amended bill of complaint filed herein by complainant:

I. Avers that it has no information or belief sufficient to enable it to either admit or deny the allegation in said bill contained, to-wit: That before the 17th day of June, 1879, one M. Campbell Brown, of Cleveland, Ohio, was the original or first inventor of a certain new or useful invention in railroad freight cars, or that the same was a new or useful invention, and therefore denies the same.

II. Admits that the improvement or device claimed to have been invented by said M. Campbell Brown, is as described on page one of complainant's second amended bill of complaint.

III. Avers that it has no information or belief sufficient to enable it to either admit or deny the allegation in said bill contained, to-wit: that said improvement or device was not known or used by others before the alleged invention thereof by said M. Campbell Brown, or that at the time of his application the same had not been in public use or on sale for two years, or abandoned, or proved to have been abandoned, and therefore denies the same.

41 IV. Admits that letters patent of the United States were is-

sued to said M. Campbell Brown, as alleged in said second amended bill of complaint, and admits that complainant herein is now and since the first day of July, 1885, has been the owner of said letters patent, together with all rights and liberties by them conferred.

V. Admits that it received and transported for persons other than complainant two certain cars constructed for the purpose of transporting oil in bulk in one direction and for the transportation of ordinary merchandise, on return trips, in the other direction, but denies that the cars so transported, or either of them, had incorporated into them, or either of them, the said invention of said M. Campbell Brown.

VI. Avers that when it received said cars from a connecting carrier at its terminal station it was ignorant of the internal structure of said cars, or either of them, and was not aware that said cars, or either of them, were so constructed as to infringe upon the patent or patent-rights granted to said M. Campbell Brown and by him conveyed to complainant, or upon any other patent or patent-right; avers that when said cars were delivered to it by said connecting carrier the same were locked and sealed and this defendant had no means of informing itself as to the internal structure of said cars, or either of them, and that it was impossible for it to know whether or not
42 said cars, or either of them, contained anything which infringed upon said or any patent or patent-rights.

VII. Avers that no more than two of such cars have been received or transported by this defendant for any person or persons other than complainant.

VIII. Avers that when it received and transported the two cars referred to it had no notice or knowledge, and had no means of knowing or learning, that the same were infringements of said letters patent, or were made according to the invention therein described or thereby protected or secured to complainant, as alleged in said second amended bill of complaint, or contrary to the law and form of the Statutes of the United States in such cases made and provided.

IX. Denies that it continues to infringe upon said letters patent or to unlawfully use said invention, and denies that it has at any time infringed upon said letters patent or has unlawfully used said invention.

X. Admits that complainant has requested this defendant to desist from the use of said invention and to account to it for damages sustained; avers that it has not, since the receipt of said request, received, used or transported any of such cars for itself or for any person or persons other than complainant; denies that, by reason of any unlawful act of this defendant, the complainant has been injured or damaged.

XI. Avers that it does not now, and never did own, any of the cars alleged by complainant to be an infringement upon complainant's said letters patent, that it does not now and never did own or claim any interest therein, and that it has not in its possession or under its control any of such
 43 cars. And for a further, separate and distinct answer and defense, this defendant avers that it is a common carrier for hire: that, as such, it is its custom and duty to receive and transport over its railroad lines cars belonging to other corporations, firms and individuals; that under the laws of the United States it is required to receive all cars, without discrimination; and to transport the same upon like terms for all persons, provided such cars are in good condition and equipped as required by the rules of this defendant; that it has no means of ascertaining whether cars offered to it for transportation are or contain infringements upon patent-rights or not; that immediately upon receipt of notice from complainant this defendant sent to the owners of said cars complained of a copy of said notice, and notified them that it would transport no more of said cars unless secured by said owners against all losses and damages; that said owners refused to give such security and that this defendant has neither received nor transported any of such cars since the receipt of said notice from complainant.

Wherefore, this defendant asks the judgment of this Honorable Court in the premises.

FRANK SHAY,
Solicitor for Defendant,
The Southern Pacific Company.

44 STATE OF CALIFORNIA,
City and County of San Francisco, { ss.

G. L. Lansing, being duly sworn, deposes and says that he is the Secretary of the Southern Pacific Company, a defendant in the above entitled action: that he has read the foregoing answer and knows the contents thereof, and that the same is true of his own knowledge, except as to the matters which are therein stated on his information or belief, and as to those matters, that he believes it to be true.

G. L. LANSING.

Subscribed and sworn to before me this 6th day of January, 1890.

[SEAL.]

E. B. RYAN,
Notary Public.

(Endorsed:) Service by copy admitted January 6, 1890. Pillsbury & Blanding, Solicitors for Complainant. Filed January 6, 1890. L. S. B. Sawyer, Clerk.

45 *Replication to answer of S. P. Co.*

In the Circuit Court of the United States for the Northern District of California in the Ninth Circuit.

STANDARD OIL COMPANY OF IOWA, Complainant,)
vs.)
 SOUTHERN PACIFIC COMPANY *et al.*, Defendants. }

The replication of the Standard Oil Company, of Iowa, plaintiff, to the answer of the Southern Pacific Company, defendant.

This repliant, saving and reserving to itself all, and all manner of advantage of exception to the manifold insufficiencies of the answer of said Southern Pacific Company, for replication thereunto, saith: That it will aver, and prove, its said bill of complaint to be true, certain and sufficient in law to be answered unto, and that the said answer of the said defendant, the Southern Pacific Company, is uncertain, untrue and insufficient to be replied unto by this repliant; without this, that any other matter or thing whatsoever in the said answer contained, material or effectual in the law to be replied unto, confessed and avoided, traversed or denied is true: all which matters and things this repliant is and will be ready to aver and prove as this Honorable Court shall direct; and humbly prays, as, in and by its said bill, it hath already prayed.

PILLSBURY & BLANDING,
Solicitors for Complainant.

(Endorsed:) Due service of within replication to answer of def't. Southern Pacific Co., admitted this 3d day of February, 1890. Frank Shay, Solicitor S. P. Co. Jno. L. Boone, Solicitor for Whittier, Fuller & Co. Filed February 3, 1890. L. S. B. Sawyer, Clerk. By F. D. Monekton, Dp'y Cl'k.

46 *Order overruling demurrer of Whittier, Fuller & Co.*

At a stated term, to wit: the February term A. D. 1890, of the Circuit Court of the United States of America, of the Ninth Judicial Circuit, in and for the Northern District of California, held at the court room in the City and County of San Francisco, on Monday, the 31st day of March, in the year of our Lord one thousand eight hundred and ninety.

Present: The Honorable Lorenzo Sawyer, Circuit Judge.

STANDARD OIL COMPANY OF IOWA,)
vs.) No. 10,575.
 THE SOUTHERN PACIFIC COMPANY *et al.* }

This cause heretofore argued and submitted to the Court for consideration and decision upon the demurrer of Whittier,

Fuller and Company to the second amended bill of complaint herein having been duly considered, it is ordered that said demurrer be and the same hereby is overruled, with leave to said respondent Whittier, Fuller and Company to answer, on the payment of twenty dollars costs, on or before the next rule day.

47 *Answer of Whittier, Fuller & Co., to Second Amended Bill.*

In the Circuit Court of the United States, in and for the Northern District of California.

STANDARD OIL COMPANY (a Corporation),	} In Equity.
Complainant,	
<i>vs.</i>	} No. 10,575.
SOUTHERN PACIFIC COMPANY (a Corporation)	
and WHITTIER, FULLER & Co. (a Firm),	
Defendants. }	

The defendant, Whittier, Fuller & Co., saving and reserving to itself, now and at all times hereafter, all and all manner of benefit and advantage of exception, which can or may be had or taken to the said complainant's said bill of complaint for answer thereto, or to so much thereof as this defendant is advised is in any wise material or necessary for it to make answer unto, and answers and says:

This defendant denies that before the 17th day of June, 1879, M. Campbell Brown, of Cleveland, Ohio, was the original or first inventor of the improvements in railroad cars set out, mentioned and described on page 1 of said Bill of Complaint. Denies that the same was a new or useful invention or that it was an invention at all.

Denies that the same was not known or used by others before the alleged invention thereof by the said M. Campbell Brown, or that at the time of his application for a patent therefor the said alleged invention had not been in public use or on sale for two years. This defendant admits that letters patent of the United States were on the 17th day of June, 1879, issued by the United States Patent Office to M. Campbell Brown, of Cleveland, Ohio, for a certain combination of parts aggregated into a railroad freight car, but denies that the same

48 was or is an invention, or that it involved any invention to so aggregate those parts as the same are described and claimed in said letters patent. Denies that the same was not known or used by others before the alleged invention thereof by the said M. Campbell Brown, or that at the time of his application for a patent therefor the said alleged invention had not been in public use or on sale for two years. Denies that the said letters patent are valid or of any force or effect what-

ever. Denies that prior to the issuing of said letters patent all proceedings were had or taken which were required by law to be had or taken previous to the issuance of letters patents, granting special rights and liberties for new and useful inventions. Denies that always since the grant of said alleged letters patent, in the exercise of the full and exclusive right and liberty granted by said alleged letters patent, the respective owners thereof have made, constructed, used or vended to others to be used, the said alleged improvement so alleged to have been patented, or have maintained until the alleged infringement by these defendants possession of said alleged improvement or alleged invention by virtue of said alleged letters patent. And in this regard this defendant avers and will show to your Honors at the hearing of this cause that the same combination or aggregation of parts and the said alleged invention described and claimed in and by said alleged letters patent had been patented and fully described and claimed long prior to the date of said M. Campbell Brown's application for said alleged letters patent in and by the following described United States letters patent, viz:

- 49 (1) Letters patent No. 190,542, issued to H. G. Brooks, May 8th, 1877.
- (2) Letters patent No. 50,126, issued to G. W. Howard, September 26th, 1865.
- (3) Letters patent No. 58,746, issued to W. C. Allison, October 16th, 1866.
- (4) Letters patent No. 168,061, issued to Steventon & McGrath, September 21st, 1875.
- (5) Letters patent No. 114,748, issued to G. W. Fox, May 16th, 1871.
- (6) Letters patent No. 50,126, issued to G. W. Howard, September 26th, 1865.
- (7) Letters patent No. 163,538, issued to P. and G. R. S. Sinibaldi, May 18th, 1875.
- (8) Letters patent No. 163,515, issued to Albert P. Odell, May 18th, 1875.
- (9) Letters patent No. 40,458, issued to John Clark, November 3rd, 1863, and the reissue of the same patent being reissue No. 4,788, dated March 5th, 1872.
- (10) Letters patent No. 45,834, issued to Joel F. Keeler, January 10th, 1865, and the reissue of the same patent, being reissue No. 2,031, dated July 18th, 1865, and a second reissue of same patent, being reissue No. 3,622, dated August 31, 1869.
- (11) Letters patent No. 55,831, issued to J. Densmore and G. W. N. Yost, June 26th, 1866.
- (12) Letters patent No. 55,832, issued to James Densmore, Amos Densmore and G. W. N. Yost, June 26th, 1866.

This respondent denies that it is now using or has ever made, constructed or used any railroad car, or freight car, or car for containing or hauling petroleum in one direction and merchandise in an opposite direction, made like or similar to or containing the combination of devices or aggregation of devices described in or claimed or covered by said alleged letters patent, or in violation or infringement thereof. Denies that any car, owned or belonging to or used by this defendant or hauled for it by the Southern Pacific Company, its co-defendant herein, is an infringement upon said alleged letters patent, or were or are made according to the alleged invention described or
50 claimed therein. Denies that it intends to continue to use any car constructed in violation of said alleged letters patent, or in any way infringing upon such alleged invention. Denies that the complainant herein will be subject to great or irreparable injury or any injury whatever unless it shall obtain the relief sought for in this action. Without this, that there is any other matter, cause or thing in the said bill of complaint contained material or necessary for this defendant to make answer unto, and not herein and hereby well and sufficiently answered, confessed, traversed and avoided or denied, is true to the knowledge or belief of this defendant, all which matters and things this defendant is ready and willing to aver, maintain and prove, as this Honorable Court shall direct, and humbly prays to be hence dismissed with its reasonable costs and charges in this behalf most wrongfully sustained.

JOHN L. BOONE,

Solicitor for Whittier, Fuller & Co.

51 STATE OF CALIFORNIA, }
City and County of San Francisco, } ss.

WILLIAM F. WHITTIER, being duly sworn, deposes and says: That he is a member of the firm of Whittier, Fuller & Co., one of the defendants in the above entitled action; that he has heard read the foregoing answer and knows the contents thereof; that the same is true of his own knowledge, except as to those matters which are therein stated on his information or belief, and as to those matters that he believes it to be true.

W. F. WHITTIER.

Subscribed and sworn to before me this 7th day of April, 1890.
[SEAL.] LEWIS B. HARRIS,

Notary Public.

(Endorsed:) Receipt of within answer by copy, admitted this 7th day of April, 1890. Pillsbury & Blanding, Solicitor for Compl. Filed April 7, 1890. L. S. B. Sawyer, Clerk.

52 *Replication to answer of Whittier, Fuller & Co.*

In the Circuit Court of the United States for the Northern District of California, in the Ninth Circuit.

STANDARD OIL COMPANY (a Corporation),	}	In Equity.
Complainant,		
<i>vs.</i>		
SOUTHERN PACIFIC COMPANY <i>et als.</i> ,	}	No. 10,575.
Defendants.		

Replication of complainant to answer of Defendant Whittier, Fuller & Co.

This repliant, the Standard Oil Company, a corporation, saving and reserving unto itself all and all manner of advantage of exception to the manifold insufficiencies of the answer of Whittier, Fuller & Co., filed herein, for and by way of replication thereunto says: that it will aver and prove its said second amended bill of complaint herein to be true, certain and sufficient in law to be answered unto by the said defendant, and that the said answer of the said defendant making the same is untrue, uncertain and insufficient in law to be replied unto by this repliant, without this, that any other matter or thing whatsoever in the said answer contained material or effectual in the law to be replied unto confessed and avoided, traversed or denied, is true; all which matters and things this repliant is and will be ready to aver and prove as this Honorable Court shall direct, and humbly prays as in and by its said second amended bill of complaint it has already prayed.

PILLSBURY & BLANDING,
Solicitors for Complainant.

(Endorsed:) Due service of within replication admitted this 3d day of May, 1890. Jno. L. Boone, Sol. for said Deft. Filed May, 5th, 1890. L. S. B. Sawyer, Clerk. By F. D. Monekton, Dp'y Cl'k.

Bill of Revivor.

In the Circuit Court of the United States, for the Northern District of California, in the Ninth Circuit.

STANDARD OIL COMPANY OF IOWA (a Corporation),	}	No. 10575
Plaintiff,		
<i>vs.</i>		
SOUTHERN PACIFIC COMPANY (a Corporation), and WILLIAM F. WHITTIER, FREDERICK N. WOODS and WILLIAM P. FULLER, JR., surviving part- ners of the firm of WHITTIER, FULLER & Co., and MARGARET H. FULLER, Executrix of the last Will and Testament of WILLIAM P. FULLER, deceased,	}	Bill of Re- vivor in Equity.
Defendants.		

To the Honorable the Judges of the Circuit Court of the United States, for the Northern District of California, in the Ninth Circuit.

Standard Oil Company of Iowa, a corporation organized and existing under and by virtue of the laws of the State of Iowa, and a citizen of said State of Iowa, brings this, its Bill of Revivor, against Southern Pacific Company, a corporation, under the laws of the State of Kentucky, and a citizen of the State of Kentucky, and William F. Whittier, Frederick N. Woods and William P. Fuller, Jr., surviving partners of the firm of Whittier, Fuller & Co., and Margaret H. Fuller, executrix of the last will and testament of William P. Fuller, deceased, all of said individual defendants being citizens and residents of the State of California; and thereupon your orator complains and says, that on or about the 4th day of November, 1889, your orator did exhibit and file its original bill of complaint in

54 this Honorable Court against Southern Pacific Company, a corporation, under the laws of the State of Kentucky, and that thereafter such proceedings were had in said suit that by the order and direction of this Honorable Court in that behalf, William F. Whittier, William P. Fuller, Frederick N. Woods and William P. Fuller, Jr., as co-partners doing business under the firm name of Whittier, Fuller & Co., were allowed and permitted to intervene in said action, and your orator was ordered and directed to file, and did thereafter, on the 3rd day of January, 1890, file an amended bill in said suit, making the said firm of William F. Whittier, William P. Fuller, Frederick N. Woods and William P. Fuller, Jr., as co-partners under the firm name and style of Whittier, Fuller & Co., respondents therein, jointly, and together with the said Southern Pacific Company. That in and by said amended bill in said original suit it was (among

other things) alleged and stated that said respondents were infringing, and would continue to infringe, certain letters patent of the United States, in the amended bill in said original suit set forth and described, and of which letters patent your orator was, at the time of the commencement of said original suit, ever since continuously has been, and now is the owner. And that said amended bill in said original suit requested and prayed that said respondents might answer the premises, and might be decreed to account for and pay over to your orator all such gains and profits as had accrued to them from making, or using, or selling the railroad cars containing the invention for which said letters patent were issued, and that this Honorable Court should assess or cause to be assessed the damages which complainant had sustained by reason of the matters and things in said original suit described, and the infringements therein complained of, and that said damages, when so assessed, might be increased to an amount not exceeding three times the sum at which they should be assessed, and that the respondents should be adjudged and decreed to pay to your orator the damages so assessed, and also the amount to which they might be increased, in addition to the gains and profits prayed for, and that the respondents in said original suit might be restrained by an injunction issuing out of this Honorable Court from making, using or vending to others to be used, or transferring in any way any railroad cars embracing the improvements secured to your orator by said letters patent, and that the railroad cars containing said invention, manufactured or purchased, or in any manner obtained by, and then in the possession of said respondents, might be destroyed or delivered up to your orator, and for such other and further relief as the nature of the case might require, and as to your Honors might seem meet. That thereafter such proceedings were had in said original suit that all and singular the said respondents duly appeared and filed their answers therein, on or about the 7th day of April, 1890, to which answers replications were duly filed by and on the part of your orator.

That pending the time of taking testimony in said original suit, the respondent, William P. Fuller, a member of the copartnership of Whittier, Fuller & Co., departed this life at the City and County of San Francisco, State of California, on the 17th day of May, 1890, said William P. Fuller, deceased, being at the time of his death a resident of said City and County of San Francisco. That, as your orator alleges, upon its information and belief, said William P. Fuller, before departing this life, duly made and published his last will and testament, in writing, which last will and testament was, by the judgment and order of the Superior Court of the said City and County of

San Francisco, duly admitted to probate, and established as the last will and testament of the said deceased, on the 13th day of June, 1890, and that said judgment and order was duly given and made, and has not been appealed from, set aside or modified, but remains in full force and effect. That under and by virtue of the terms and provisions of said last will and testament, said William P. Fuller, deceased, nominated and appointed Margaret H. Fuller, his wife, as sole executrix of his said last will and testament; and that, on the 13th day of June, 1890, letters testamentary, in due form of law, in the matter of said estate, were duly issued out of and under the seal of the said Superior Court of the said City and County of San Francisco, to the said Margaret H. Fuller, appointing her as the sole executrix of the said last will and testament, and that the said Margaret H. Fuller therefore accepted her said appointment as such executrix and thereupon duly qualified and entered upon the discharge of her duties as such executrix, and ever since
57 has been, and still is the executrix of the last will and testament of said William P. Fuller, deceased. That all and singular the orders, proceedings, judgments and decrees of the said Superior Court of the said City and County of San Francisco, in the matter of the estate of the said William P. Fuller, deceased, were duly had, given and made, and that said estate is still in progress of administration and unsettled. That the said defendants, prior to the death of said William P. Fuller, were infringing the said letters patent owned by your orator, as set forth in the amended bill in said original suit, and that, as your orator alleges on information and belief, the said defendants, including the said Margaret H. Fuller, executrix as aforesaid, will continue hereafter to infringe upon said letters patent, to the great and irreparable damage of plaintiff. That the said partnership of Whittier, Fuller & Co. was and is dissolved by the death of the said William P. Fuller, and that the said original suit, and any and all further proceedings therein, have become abated by the death of said William P. Fuller, deceased; and your orator is advised that it is entitled to have said suit and said proceedings revived as against the defendants herein, and to have the said suit and proceedings therein put in the same state, plight and condition as they were in previously to the abatement thereof by the death of the said William P. Fuller, deceased.

Wherefore, your orator prays that the said suit may be revived by the decree of this Honorable Court, and that it may proceed to a decree in its favor, in accordance with the prayer of the original bill herein. To the end, therefore, that the
58 said suit and the proceedings therein may stand revived, and be in the same state, plight and condition in which

they were at the time of the death of the said William P. Fuller, or that the defendants may show good cause to the contrary. May it please your Honors to grant unto your orator a writ of subpoena to revive, issuing out of and under the seal of this Honorable Court, to be directed to the said respondents, thereby commanding them at a day certain, and under a certain penalty, to be therein inserted, personally to be and appear before your Honors in this Honorable Court, then and there to show cause, if any they have or can show, why the said suit and the proceedings therein had, should not be revived against them, and each of them, and be in the same state, plight and condition as they were in at the time of the said abatement thereof, and further to stand to and abide by such order and decree in the premises as to your Honors shall seem meet. And if no cause shall be shown by said defendants why said suit should not be revived, then that a decree of revivor be entered herein, reviving said suit in favor of your orator, and your orator will ever pray, etc.

PILLSBURY & BLANDING,
Solicitors for Plaintiff.

J. H. MILLER,
Of Counsel.

59 CITY AND COUNTY OF SAN FRANCISCO, }
Northern District of California, } ss.
State of California, }

E. A. Tilford, being first duly sworn, deposes and says, that he is an officer, to wit, the President of the above-named plaintiff, The Standard Oil Company of Iowa; that he has read the foregoing bill of revivor and knows the contents thereof, and that the same is true of his own knowledge, except as to the matters and things which are therein alleged upon his information and belief, and as to those matters, that he believes the same to be true.

E. A. TILFORD.

Subscribed and sworn to before me, this 24th day of July, A. D. 1890.

L. S. B. SAWYER,
*Commissioner U. S. Circuit Court,
Northern District of California.*

[SEAL.]

(Endorsed:) Filed July 25th, 1890. L. S. B. Sawyer, Clerk.

60 *Subpoena ad respondendum on Bill of Revivor.*

UNITED STATES OF AMERICA:

Circuit Court of the United States for the Northern District of California, in the Ninth Judicial Circuit. In Equity.

The President of the United States of America, Greeting: To Southern Pacific Company, a corporation, and William F. Whittier, Frederick N. Woods and William P. Fuller, Jr., surviving partners of the firm of Whittier, Fuller and Co., and Margaret H. Fuller, executrix of the last will and testament of William P. Fuller, deceased:

You are hereby commanded, That you be and appear in said Circuit Court of the United States aforesaid, at the court room thereof, in the City and County of San Francisco, State of California, on the 1st day of September, A. D. 1890, being the next rule day of said Court, to answer a bill of revivor to revive the suit hereinafter mentioned exhibited against you in said Court by the Standard Oil Company, a corporation, and you are hereby required to show cause, if any you can, before said Court, on said day, why that certain suit or cause wherein the Standard Oil Company, a corporation, was complainant, and said Southern Pacific Company, a corporation, and William F. Whittier, Frederick N. Woods and William P. Fuller, Jr., surviving partners of the firm of Whittier, Fuller and Co., and Margaret H. Fuller, executrix of the last will and testament of William P. Fuller, deceased, were respondents, should not be revived in the name of said plaintiff against you, and each of you, as defendants, and to do and receive what the said Court shall have considered in that behalf. And this you are not to omit, under the penalty of five thousand dollars.

Witness the Honorable Melville Weston Fuller, Chief Justice of the Supreme Court of the United States, this 25th day of July, in the year of our Lord one thousand eight hundred and ninety, and of our independence the 114th.

[SEAL.]

L. S. B. SAWYER, *Clerk.*

Memorandum pursuant to Rule 12, Supreme Court, U. S.

You are hereby required to enter your appearance in the above suit, on or before the first Monday of September next, at the Clerk's office of said Court, pursuant to said bill; otherwise the said bill will be taken *pro confesso*.

L. S. B. SAWYER, *Clerk.*

UNITED STATES MARSHAL'S OFFICE,)
Northern District of California.)

I hereby certify that I received the within writ on the 25th

day of July, 1890, and personally served the same on the 25th day of July, 1890, on William F. Fuller, Fred. N. Woods, Wm. P. Fuller, Jr. and Margaret H. Fuller, by delivering to and leaving with William F. Fuller, Fred. N. Woods, Wm. P. Fuller, Jr., and Margaret H. Fuller, said defendants named therein personally, at the City and County of San Francisco, in said District, an attested copy thereof

W. G. LONG,

U. S. Marshal.

By JAMES R. DEANE,

Deputy.

San Francisco, July 29, 1890.

62

UNITED STATES MARSHAL'S OFFICE,

Northern District of California.

I hereby certify that I received the within writ on the 25 day of July, 1890, and personally served the same on the 28 day of July, 1890, on Southern Pacific Company, by delivering to and leaving with C. F. Crocker, Vice-President of said Southern Pacific Company, said defendant named therein personally at the City and County of San Francisco, in said District, an attested copy thereof.

W. G. LONG, *U. S. Marshal.*

By JAMES R. DEANE, *Deputy.*

San Francisco, July 29, 1890.

(Endorsed:) Filed July 28, 1890. L. S. B. Sawyer, Clerk.

63

Order of revivor.

In the Circuit Court of the United States, for the Northern District of California, in the Ninth Circuit.

STANDARD OIL COMPANY, OF IOWA (a Corporation),
Plaintiff,

vs.

SOUTHERN PACIFIC COMPANY (a Corporation), and
WILLIAM F. WHITTIER, FREDERICK N. WOODS
AND WILLIAM P. FULLER, JR., surviving part-
ners of the firm of WHITTIER, FULLER & Co.,
and MARGARET H. FULLER, Executrix of the
last will and testament of WILLIAM P FULLER,
deceased,
Defendants.

No. 10,575

Plaintiff having heretore, to wit: on the 25th day of July, 1890, duly filed herein its bill of revivor against all the original defendants in said cause, and, also, against Margaret H. Fuller, as executrix of the last will and testament of William P. Fuller, deceased, and it appearing that William P. Fuller was one of the original defendants herein and was sued, together with the

other personal defendants, as a member of the firm of Whittier, Fuller & Co., and that said William P. Fuller departed this life in said City and County of San Francisco, State of California, on the 17th day of May, 1890, and that said William P. Fuller left a last will and testament, whereby he appointed said Margaret H. Fuller as his sole executrix, which last will and testament was, by a judgment and order of the Superior Court of the said City and County of San Francisco, duly admitted to probate and established as the last will and testament of said deceased on the 13th day of June, 1890, and said judgment and order having been duly given and made, and not having been appealed from, set aside or modified, and letters testamentary, in due form of law, in the matter of the estate of said William P. Fuller, deceased, having been duly issued out of and under the seal of said Superior Court, on the 13th day of June, 1890, to the said Margaret H. Fuller, appointing her as the sole executrix of the said last will and testament, and the said Margaret H. Fuller having thereupon accepted her said appointment as such executrix and duly qualified and entered upon the discharge of her duties as such executrix, and that all and singular the orders, proceedings, judgments and decrees of the said Superior Court, in the matter of said estate, were duly had, given and made, and that said estate is still in progress of administration and unsettled, and the defendants having, heretofore, to wit: on the 2nd day of September, 1890, appeared to the said bill of revivor and moved this Court to dismiss said bill and to strike the same from the files, and said motion having come on to be heard, in open court, in its regular order upon the calendar of this Court at a regular and stated term of this Court, on the 20th day of October, 1890, and said motion having been argued by the respective solicitors for plaintiff and defendants, and the same having been submitted to the Court for decision, and the Court being fully advised in the premises and having, on the 17th day of November, 1890, denied said motion, and the said defendants, including the said Margaret H. Fuller, as executrix aforesaid, having shown no cause why the prayer of said bill of revivor, should not be granted, and not having pleaded, demurred or answered the said bill and good cause appearing therefor,

Now, therefore, it is hereby ordered, adjudged and decreed that the original suit and all and singular the proceedings therein stand revived as against all the said defendants, including the said Margaret H. Fuller, as executrix as aforesaid, and that said executrix be substituted as a defendant in the place of said William P. Fuller, deceased, and that said original suit and all and singular the proceedings therein stand and be in

the same plight and condition as the same were in at the date of the death of said William P. Fuller, deceased.

HAWLEY, *Judge*.

Dated San Francisco, December 9th, 1890.

(Endorsed:) Filed Dec. 16th, 1890. L. S. B. Sawyer, Clerk.
By F. D. Monckton, Dp'y Cl'k.

66

Enrollment.

In the Circuit Court of the United States, Ninth Circuit, Northern District of California.

STANDARD OIL CO. OF IOWA, Complainant,	} No. 10,575.
<i>vs.</i>	
SOUTHERN PACIFIC CO., ET AL., Respondents.	

The complainant filed its bill of complaint herein on the 4th day of November, 1889, which is hereto annexed.

A subpœna to appear and answer in said cause was thereupon issued, returnable on the 2d day of December, A. D. 1889, which is hereto annexed.

On the 2d day of December, 1889, an answer was filed herein, which is hereto annexed.

On the 5th day of December, 1889, a petition for interpleader was filed herein and is hereto annexed.

A demurrer and an answer to said petition were filed herein on the 9th day of December, 1889, and are hereto annexed, and on the same day an order that complainant file an amended bill of complaint, etc., was made and entered herein, a copy of which order is hereto annexed.

An amended bill of complaint was filed herein on the 19th day of December, 1889, and is hereto annexed.

On the 3d day of January, 1890, a second amended bill of complaint was filed herein and is hereto annexed.

A demurrer to said second amended bill of complaint was filed herein on the 6th day of January, 1890, and is hereto annexed, and on the same day an answer was filed herein and is hereto annexed.

67 A replication to answer was filed herein on the 3d day of February, 1890, and is hereto annexed.

An order overruling said demurrer to said second amended bill of complaint was made and entered herein on the 31st day of March, 1890, and a copy of said order is hereto annexed.

The answer of the respondents, Whittier Fuller & Company was filed herein on the 7th day of April, and is hereto annexed, and a replication thereto was filed herein on the 5th day of May, 1890, which replication is also hereto annexed.

A bill of revivor was filed herein on the 25th day of July, 1890, and is hereto annexed, and thereupon a subpœna to ap-

pear and answer herein was issued, which subpoena is hereto annexed.

An order of revivor was filed herein on the 16th day of December, 1890, and is hereto annexed.

Thereafter a final decree was filed and entered herein in the words and figures following, to wit:

68

Decree.

At a stated term, to wit, the July term, A. D., 1891, of the Circuit Court of the United States of America, of the Ninth Judicial Circuit, in and for the Northern District of California, held at the court room in the City and County of San Francisco, on Monday, the 12th day of October, in the year of Our Lord one thousand eight hundred and ninety-one.

Present: The Honorable Thomas P. Hawley, U. S. District Judge, District of Nevada.

STANDARD OIL COMPANY OF IOWA	} No. 10,575.
<i>vs.</i>	
SOUTHERN PACIFIC COMPANY AND WHITIER, FULLER & COMPANY.	

This cause came on to be heard at the February, 1891, term of this Court, and was argued by counsel and submitted to the Court for consideration and decision, and thereupon, upon consideration thereof, it is ordered, adjudged and decreed that the complainant's bill of complaint herein be, and the same hereby is, dismissed at complainant's cost.

THOMAS P. HAWLEY,
*U. S. District Judge,
District of Nevada.*

(Endorsed:) Filed and entered Oct. 12, 1891. L. S. B. Sawyer, Clerk.

69

Memorandum of Costs and Disbursements.

UNITED STATES OF AMERICA:

Circuit Court of the United States, Ninth Circuit, District of California.

STANDARD OIL Co., Plaintiff,	}
<i>vs.</i>	
SOUTHERN PACIFIC Co., ET AL., Defendant.	}

Disbursements:

Marshal's fees	
Clerk's fees	\$ 28 95
Witness' fees (Ueffinger 1 day, Woods 2 days)	4 50

Examiner's fees.....	44 40
Two models.....	30 00
Docket fee, Attorneys.....	20 00
Oath to Cost Bill.....	50

\$128 35

Oct. 24, 1891, less wit. Woods..... 3 00

By con. 10 days stay procdgs. taxed at..... \$125 35

L. S. B. SAWYER, *Clerk.*

UNITED STATES OF AMERICA,
District of California, } ss.
City and County of San Francisco,

John L. Boone, being duly sworn, deposes and says: That he is the attorney for the respondent, Whittier, Fuller & Co., in the above-entitled cause, and as such is better informed relative to the above costs and disbursements than the said respondent, Whittier, Fuller & Co. That the items in the above memorandum contained are correct, to the best of this deponent's knowledge and belief, and that the said disbursements have been necessarily incurred in the said cause.

JOHN L. BOONE.

Subscribed and sworn to before me this 16th day of October, A. D. 1881.

[SEAL.]

LEE D. CRAIG,
Notary Public.

70 To Messrs. Pillsbury & Blanding and Langhorne & Miller, Solicitors for Complainant.

You will please take notice that on Monday, the 19th day of October, A. D. 1891, at the hour of 10:30 o'clock A. M., I will apply to the Clerk of said Court to have the within memorandum of costs and disbursements taxed pursuant to the rule of said Court, in such case made and provided.

JOHN L. BOONE,
Attorney for Respondent Whittier, Fuller & Co.

Service of within memorandum of costs and disbursements, and receipt of a copy thereof, acknowledged this 16th day of Oct., A. D. 1891.

PILLSBURY & BLANDING,
Attorneys for Plff.

(Endorsed): Filed this 16th day of Oct., A. D. 1891. L. S. B. Sawyer, Clerk.

71

Certificate to Enrollment.

Whereupon said pleadings, subpoenas, copies of orders, order of revivor, decree and a memorandum of taxed costs are hereto annexed, said final decree being duly signed, filed and enrolled pursuant to the practice of said Circuit Court.

Attest, etc.,

[SEAL.]

L. S. B. SAWYER, *Clerk.*

(Endorsed:) Enrolled papers. Filed October 12, 1891. L. S. B. Sawyer, Clerk.

72

Caption to Depositions.

In the Circuit Court of the United States for the Ninth Judicial Circuit, in and for the District of California.

STANDARD OIL COMPANY OF IOWA Complainant,	} In Equity.
<i>vs.</i>	
SOUTHERN PACIFIC COMPANY, Respondent.	} No. 10,575.

Be it remembered, that on the 26th day of November, A. D. 1889, and on the several days thereafter to which the examination was regularly adjourned, as hereinafter set forth, at my Office, Room 57, in the United States Appraiser's Building, on the northeast corner of Washington and Sansome Streets, in the City and County of San Francisco, State of California, before me, A. L. Coombs, Special Examiner in Chancery, of the Circuit Court of the United States for the Ninth Circuit and District of California, personally appeared the several witnesses whose names are hereinafter set forth, who were produced and examined on behalf of the respective parties to the above entitled cause.

E. S. Pillsbury, Esq., appeared as counsel on behalf of complainant, and Frank Shay, Esq., as counsel on behalf of respondent.

Following is a record of the proceedings:

73

TUESDAY, November 26th, 1889.

Present: Mr. Pillsbury, of Counsel for complainant; (Mr. Shay, of counsel for respondent, not being able to be present, requested that the examination proceed without his presence).

Examination-in-chief of CHARLES A. WATSON on behalf of complainant.

By Mr. PILLSBURY:

Q. 1. State your name, age, place of residence and occupation?

A. My name is Charles A. Watson; my age is thirty-eight

years; I reside in Oakland, but have my business in San Francisco; and I am by occupation traveling agent in the employ of the complainant.

(Complainant introduces in evidence United States Letters Patent No. 216,506, granted to M. Campbell Brown, June 17th, 1879, for improvement in oil cars. Marked "Complainant's Exhibit A.")

(It is agreed by both complainant and respondent that the original letters patent "Exhibit A" may be withdrawn upon the substitution in place thereof of Patent Office copy of the specification and drawings of said patent, "Exhibit A.")

Q. 2. Mr. Watson have you read the specification of the patent just put in evidence?

A. Yes, sir, I have.

Q. 3. Do you understand the construction and object of the improvement made in cars as shown in the specification and drawings of that patent?

A. I do.

Q. 4. How long have you been acquainted with the transportation of oils over the railroads of the United States, and been connected with that branch of business?

74 A. I have been familiar with the transportation of oil in that way for nineteen years, and I have been directly in the business fifteen years out of the nineteen.

Q. 5. What was the object in making the invention described in this patent "Exhibit A;" that is, what advantages were gained by it?

A. To transport oil in one direction and merchandise in the other, so that a car would at no time be entirely empty.

Q. 6. Has it been a fact that generally in the United States when oils were drawn in one direction that the car which carried them would be drawn back empty and without any load to the original place of starting?

A. Yes, sir.

Q. 7. What disadvantage was there in that practice?

A. In hauling a car back empty it was virtually deadhead, or at the expense of some one, and it was earning nothing.

Q. 8. It was to that extent, then, a dead loss of labor, was it?

A. Yes, sir.

Q. 9. Is that disadvantage remedied by a car constructed as shown in the patent "Exhibit A?"

A. Yes, sir.

Q. 10. How large a load of oils could be carried in the oil tanks described in the patent "Exhibit A?"

A. Twelve tons.

Q. 11. Is that enough to make a full carload?

A. Yes, sir.

Q. 12. Is the space devoted to merchandise in the car, as described in the patent "Exhibit A," sufficient to carry a full load of ordinary merchandise?

A. Yes, sir.

Q. 13. Where are most of the oils brought from that come to California over the railroad lines?

A. Cleveland, Ohio.

75 Q. 14. Most of the oils come from the Eastern States, do they not?

A. Yes, sir.

Q. 15. Who paid the expense of taking the car back empty in the cases where the cars brought oil to this coast and went back empty; was it the importer or the railroad?

A. The importer.

Q. 16. About what was the expense per car, for each car, to the importer for having that oil car transported back empty?

A. You have entire reference now to a car that could not be loaded back with merchandise, I presume?

Q. 17. Yes, sir; I refer to the ordinary cars for transporting oils which were used before this invention described in the patent "Exhibit A."

A. I would like to say that there is a tariff fixed by the railroad for that purpose, and if my memory serves me right, it is ninety-five dollars per car, or five cents a mile.

Q. 18. What was the construction of the ordinary cars which were used for transporting oil prior to this invention described in the patent "Exhibit A?"

A. They were an ordinary cylinder laid on a flat car.

Q. 19. Iron cylinders, I suppose?

A. Iron cylinders.

Q. 20. Those were in very common ordinary use, were they not?

A. Yes, sir.

Q. 21. Now, by this invention described in the patent "Exhibit A," was that ninety-five dollars for each car crossing the continent, or five cents per mile for running the same car, saved to the importer?

A. Yes, sir.

76 Q. 22. What kind of cars were used by the defendant, the Southern Pacific Company, for transporting oils in bulk prior to the commencement of this suit, for the last several years? State generally the different kinds?

A. Well, there were but two kinds, the cylinder cars and a car covered by the patent "Exhibit A."

Q. 23. Have you the correct drawings of the car that you

refer to in the last answer as being covered by the patent "Exhibit A," which was used by the defendant?

A. Yes, sir.

Q. 24. What other car, if any, did the defendant use for transporting oils in bulk to this Coast, and ordinary freight back over the same route from this Coast, if any?

A. They used a car which was called "Bear Creek Star Line, No. 11."

Q. 25. Have you the correct drawings of that car last mentioned?

A. I have, and here produce it.

(The drawing last above referred to is introduced in evidence by complainant, and marked "Complainant's Exhibit B.")

(By agreement of counsel for the respective parties herein, a blue print of the drawing "Exhibit B" is substituted in place thereof and the said drawing withdrawn.)

Q. 26. Please state what difference there is in construction between the car represented by the drawing "Exhibit B" and the car shown in the patent "Exhibit A," if there is any?

A. The car represented by the drawing "Exhibit B" has the tank for transporting the oil located in the center of the car, and the compartments to carry return merchandise in the ends; while the car represented in the patent "Exhibit A" has the tanks in the ends of the car and the compartment for carrying merchandise in the middle.

Q. 27. Does that difference in the arrangements of the compartments make any difference whatever in the use of the car?

A. No, sir; no difference.

Q. 28. Is one of these arrangements the exact equivalent for all practical purposes of the other arrangement?

A. Yes, sir.

Q. 29. I will now refer to the elements of the claim of the patent "Exhibit A," and ask you whether you find those several elements united and operating together in the defendant's car? First, "a car subdivided into two or more compartments." Do you find that element in the car represented by the drawing "Exhibit B"?

A. Yes, sir.

Q. 30. "Each end compartment containing an oil-tank." Do you find that element in the car represented by the drawing "Exhibit B"?

A. No, sir.

Q. 31. What do you find in place of it, if anything?

A. I find compartments for carrying the merchandise in each end.

Q. 32. Do you find any compartment for an oil-tank shown in the car represented by the drawing "Exhibit B"?

A. Yes, sir; it is in the center of the car.

Q. 33. "Said tank constructed with an inclined or self-draining bottom." Does the tank shown in the car represented by the drawing "Exhibit B" have an inclined or self-draining bottom?

A. Yes, sir.

Q. 34. "And resting upon a floor formed in counterpart thereto." Do you find that element represented in the car shown in the drawing "Exhibit B"?

A. Yes, sir.

78 Q. 35. "Said tank also having a tapering or inclined top." Do you find that element in the car represented by the drawing "Exhibit B"?

A. I do.

Q. 36. "With a filling opening placed at or near its highest point and in line with a filling-opening in the car-top." Do you find that element in the car represented by the drawing "Exhibit B"?

A. Yes, sir; I do.

Q. 37. "And there being a removable partition separating said tank from the next adjacent compartment." Do you find that element in the car represented by the drawing "Exhibit B"?

A. Yes, sir.

Q. 38. Do those elements all act together in the two cars precisely alike?

A. They do.

Q. 39. The one described in the patent "Exhibit A," and the other such as the defendant is using?

A. Yes, sir.

Q. 40. What is the object of the inclined or tapering top-mentioned in the claim of the patent "Exhibit A," just read to you?

A. It is to allow the air to reach the highest point in the tank when filling it with oil.

Q. 41. The air, being lighter than the oil, will rise as the tank is filled?

A. Yes, sir.

Q. 42. And having a tapering top it gives that air an opportunity to escape?

A. Yes, sir; and allows the filling of the tank entirely full of oil.

Q. 43. How long prior to the commencement of this suit was the defendant using cars such as are represented by the

drawing "Exhibit B"? that is, prior to the 4th day of the present month?

A. (After referring to small memorandum book.) For about a month prior to the commencement of this suit.

79 Q. 44. How many such cars did the defendant use, say within the two months last past, prior to the commencement of this suit on the fourth day of the present month?

A. Two.

Q. 45. What did the defendant do with these two cars?

A. It brought them from the east loaded with oil, and the oil was discharged from the cars here.

Examination-in-chief of GEORGE W. UEFFINGER on behalf of complainant.

By Mr. PILLSBURY:

Q. 1. State your name, age, place of residence and occupation?

A. My name is George W. Ueffinger; my age is twenty-three years; my residence San Francisco, and I am by occupation a draughtsman in the employ of W. H. Smyth.

Q. 2. Please look at the drawing "Exhibit B," and state whether you ever saw it before?

A. Yes, sir; I have.

Q. 3. What, if anything, did you have to do with making it?

A. I made the sketches from the original car, and then drew those sketches to scale, which is the drawing "Exhibit B."

Q. 4. Where was the car when you took sketches from it?

A. It was located on the track of the Southern Pacific Company at Fourth and Townsend streets, in this city.

Q. 5. That was in the defendant's railroad yard, was it?

A. Yes, sir.

Q. 6. Do you know of your own knowledge that this drawing "Exhibit B" correctly represents the car which was there in the defendant's possession at the time you made the sketches?

A. Yes, sir; that is an approximately correct copy of the original sketches which I made.

80 Q. 7. Is it a correct representation of the car?

A. Yes, sir; it is a correct representation of the car;

Q. 8. What does the central figure represent on the drawing "Exhibit B."

A. That is an outside view of the car.

Q. 9. What does the figure immediately above the central figure in that drawing represent?

A. It represents a section elevation of the car shown in the central figure.

Q. 10. What does the bottom figure represent in that drawing?

A. It represents a plan section of the central figure.

Q. 11. Taken through what part?

A. Taken through the center of the oil-tank.

Q. 12. What does the figure up at the upper right hand corner of that drawing represent?

A. It represents a cross-section of the oil car through the oil-tank, taken through the center of the car.

Q. 13. What does the top figure in the left hand corner of that drawing represent?

A. It represents a cross-section of the car beyond the tank.

Q. 14. What does the lower figure on the left hand side of the drawing "Exhibit B" represent?

A. It represents an outside view of the car.

Q. 15. In the upper middle figure of this drawing "Exhibit B" is a space in the center of the car, which is marked "oil-tank." What does that part of the car represent, or what does that part of the drawing represent?

A. It represents a square end tank, or a rectangular tank, with a dome on top of it; it represents a section of that tank.

81 Q. 16. What is that tank made of?

A. It is made of wrought iron.

Q. 17. I notice two cross-bars across that space reaching from the upper to the lower corners crossing each other in the middle—what do they represent?

A. They represent cross-braces bracing the oil tank.

Q. 18. How are those arranged in the tank?

A. They are arranged about three feet apart, and run from the upper to the lower corners—passing to the upper and lower corners of the tank.

Q. 19. What are those bars made of?

A. They are made of angle iron.

Q. 20. Whereabouts do those iron bars appear in the lower or plan figure of the drawing "Exhibit B?" if any where?

A. They appear, two of them in the center and two on each side.

Q. 21. There appears in the drawing "Exhibit B" to be a rod running from the dome of the oil-tank down through the car; what does that represent?

A. It represents a valve-rod, regulating-rod.

Q. 22. How is that used, and for what purpose?

A. It is turned, and by turning it it opens the valve at the bottom of the tank to let out the oil.

Q. 23. What do the spaces at each end of the car represent; that is, from each side of the oil-tank to the end of the car?

A. Well, they are empty spaces, like in any other freight car.

Q. 24. Just spaces for carrying ordinary freight?

A. Yes, sir.

82

SATURDAY, November 30th, 1889.

Present: Mr. Pillsbury, of counsel for complainant; Mr. Shay, of counsel for respondent.

Cross-examination of CHARLES A. WATSON.

By Mr. SHAY:

Q. 1. Do you know whether these two cars "Bear Creek Star Line" 11 and 12, represented in the drawing "Exhibit B," were returned to the original shipping point loaded or empty, by the Southern Pacific Company?

A. I do not.

Q. 2. Do you know how many trips these cars made over the Southern Pacific lines?

A. Only one, to my knowledge.

Q. 3. Did your company at any time send any notice to the Southern Pacific Company stating that this "Bear Creek Star Line" car was an infringement upon your patent, and that the Southern Pacific Company must not haul or use cars of the "Bear Creek Star Line"?

A. Yes, sir.

Q. 4. Do you know about the date?

A. I think it was on about the first of November of this year.

Q. 5. Do you know whether the Southern Pacific Company since the receipt of that notice, has hauled over its line any of the cars of the "Bear Creek Line," either loaded or empty?

A. Since sending that notice the Southern Pacific Company hauled westward car No. 12 loaded.

Q. 6. Loaded with oil?

A. Yes, sir. I believe it was en route in the possession of the defendant; on the way to San Francisco when the notice was served.

83 Q. 7. Since that car was hauled westward by the Southern Pacific Company, do you know whether that company has transported any other cars of that kind?

A. I don't know of any.

Q. 8. You would be liable to know if they had, wouldn't you?

A. I think I would; yes, sir.

By Mr. PILLSBURY:

Q. 9. You know that the complainant in this case is a corporation, do you, as stated in the bill herein?

A. Yes, sir.

(It is admitted by respondent that the patent "Exhibit A" was assigned to the Standard Oil Company, of Iowa, complainant herein, and that said company is the owner of said patent, as alleged in the bill herein.)

(It is admitted as a fact, by both complainant and respondent, that the testimony of the witness Watson is correct as to the description of the car used by the defendant, and also as to the extent of that use.)

(It is admitted as a fact, by both complainant and respondent, that the blue print of the drawing "Exhibit B" is a correct representation of the car used by the defendant Southern Pacific Company.)

(It is stipulated and agreed, by counsel for the respective parties herein, that Richard Gray, the General Traffic Manager of the Southern Pacific Company, if called, sworn and examined as a witness herein, would testify that immediately upon the receipt of notice from the Standard Oil Company, complainant

84 herein, he issued an order forbidding the receipt by terminal agents of any cars of the "Bear Creek Star Line,"

that order to remain in force until the rights of the Standard Oil Company, complainant, in the premises should have been determined; that since that time no oil-cars of that line have been transported by the Southern Pacific Company, with the exception that it returned to Ogden empty car No. 12 of that line, which car had been received by the Southern Pacific Company subsequent to the notice of the Standard Oil Company, and complainant admits that such is the fact.)

(Counsel for complainant hereby waives any claim for damages against respondent herein.)

(Testimony closed.)

85

Certificate to Depositions.

I certify that the foregoing depositions were taken at the place stated in the caption to said depositions, at the several times set forth in said depositions, in my presence, and in the presence of counsel for the respective parties to the cause in said caption entitled; that, previous to giving his testimony, each of the witnesses in said depositions named was by me duly sworn to tell the truth, the whole truth and nothing but the truth, in said cause; that said depositions were taken down in shorthand writing and transcribed by me, pursuant to stipulation and agreement of counsel; that said depo-

sitions, after being so transcribed, were read by, or by me to, the said witnesses, and signed by them, respectively, except in those cases where such reading and signing were, by agreement of said counsel, waived, as in said depositions set forth; and that I have retained said depositions for the purpose of delivering the same with my own hand to the Court for which they were taken.

Accompanying said depositions, and forming part thereof, are the several exhibits introduced in connection therewith, and referred to and specified therein.

I further certify that I am not attorney nor of counsel for any of the parties to said cause, nor in any way interested in the event thereof.

In witness whereof, I have hereunto set my hand, this 3d day of December, A. D. 1889.

A. L. COOMBS,
Special Examiner in Chancery,
U. S. Circuit Court, Dist. of Cal.

86 (Endorsed:) Testimony opened by order of Court and re-filed April 14, 1890. L. S. B. Sawyer, Clerk. By F. D. Monckton, Deputy Clerk.

Exhibit "A."

M. C. BROWN.
Oil-Car.

No. 216,506.

Patented June 17, 1879.

Fig. 1.

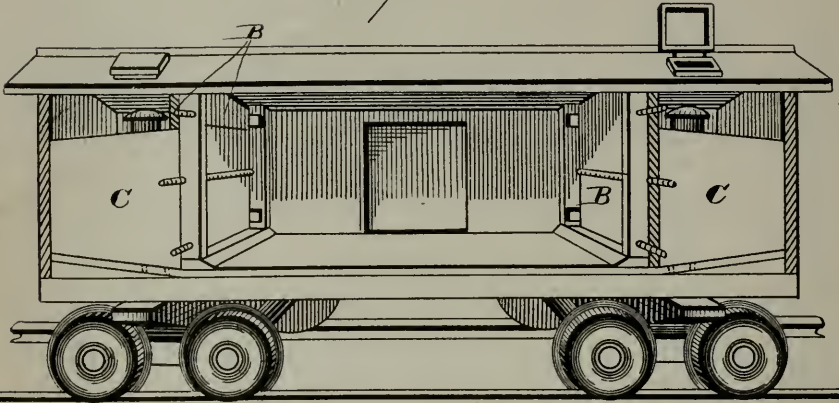
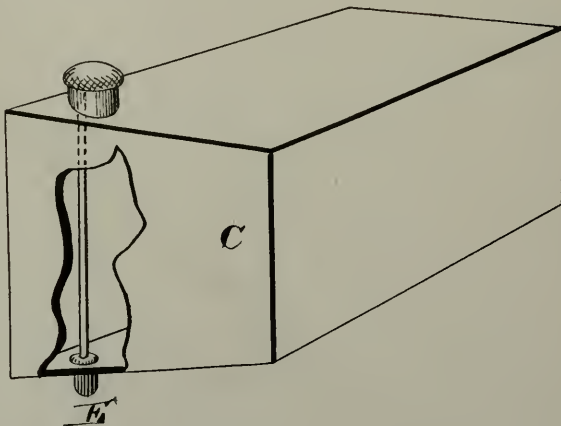


Fig. 2.



WITNESSES

E. J. Nottingham
Ambright

INVENTOR

M. C. Brown
B. Sargent & Sons

88

Complainant's Exhibit "A."

UNITED STATES PATENT OFFICE.

M. Campbell Brown, of Cleveland, Ohio.

Improvement in Oil-Cars.

Specification forming part of Letters Patent No. 216,506, dated June 17, 1879; application filed January 7, 1879.

To all whom it may concern:

Be it known that I, M. Campbell Brown, of Cleveland, in the county of Cuyahoga, and State of Ohio, have invented certain new and useful improvements in Oil-Cars; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to cars, and especially to that class of cars designed for transporting merchandise and oil or other liquids; and it consists in the parts and combination of parts hereinafter described and claimed, whereby oils or other liquids may be safely transported in the same car with miscellaneous merchandise.

In the drawings, Figure 1 represents in side elevation, and with one side removed to show the internal arrangement and construction, a car according to my invention; and Fig. 2 is a detached view representing partly in section a tank or container for carrying oil or other fluids.

The object, as briefly above stated, of my device is to produce an improved form of car for the transportation of oils and liquids in bulk, and which shall also be adapted for the transportation of ordinary merchandise on roads where a load of oil or liquid cannot be obtained on return trip, thus obviating the necessity of hauling empty tank-cars over long distances, as is now commonly done; and to this end the construction of the ordinary freight-car is modified as follows: The car-space is divided into two or more compartments; but, for the purpose of the present specification, we will suppose it to be divided into three. The central compartment, as shown in the drawings, would embrace about two-thirds of the entire length of the car, and is designed and adapted for ordinary storage, and for this purpose may be constructed in any proper manner. The two end compartments occupy each about one-sixth of the entire length of the car, are located in the ends thereof, over the trucks, and are designed and constructed to contain metallic

tanks, substantially such as shown in Fig. 2, which tanks are adapted for safely containing and transporting oil or other liquid.

I prefer to provide partitions B to extend from the roof to the floor either of the car or tank, and these partitions I make readily adjustable in order that by their removal a ready inspection of the metal tanks may be had, also permitting, in case of necessity, the removal of said tanks, which are to be made small enough to pass through the door of the car.

The floor of the central compartment is made level throughout its entire extent; but in the end compartments, commencing at the point where the partitions B and the floor meet, it is gradually elevated toward each end of the car, thus affording a reliable drainage, which would secure the contents of the central compartment against damage should either tank leak.

In this connection I would suggest that the floor of the car beneath the tanks be sufficiently perforated to permit the escape of leaking fluid.

I also construct the tanks in such a manner as to secure a ready and perfect drainage of their contents in discharging. Their bottoms are inclined to fit on the bottoms of their respective compartments in the car, and from the lowest point of each of the same the discharge-pipe E leads.

The discharge-pipe E should be supplied with any suitable stop-cock arrangement or its equivalent.

In order to fill the tanks I make an opening through their top, which opening shall register with the door in the roof of the car, through which the tanks may be filled.

Not only should the floor of the car beneath that portion where the tanks are placed be formed on a slant corresponding with the slanting bottom of said tanks, but I also make the top of each tank inclined, and form their filling point at the highest part of the tank, so as to permit a free escape of air while filling.

The reservoirs or tanks referred to should be firmly secured in any manner to their place in the car against displacement during transit, and this may be done by stay-rods or anything of the kind.

I am aware that the several features embodied in my improvement are not independently new, and I restrict the invention to the specific combination of parts set forth in the claim.

What I claim is—

A car subdivided into two or more compartments, each end compartment containing an oil-tank, said tank constructed with an inclined or self-draining bottom, and resting upon a floor formed in counterpart thereto, said tank also having a

tapering or inclined top with a filling-opening placed at or near its highest point and in line with a filling-opening in the car-top, and there being a removable partition separating said tank from the next adjacent compartment, all combined substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

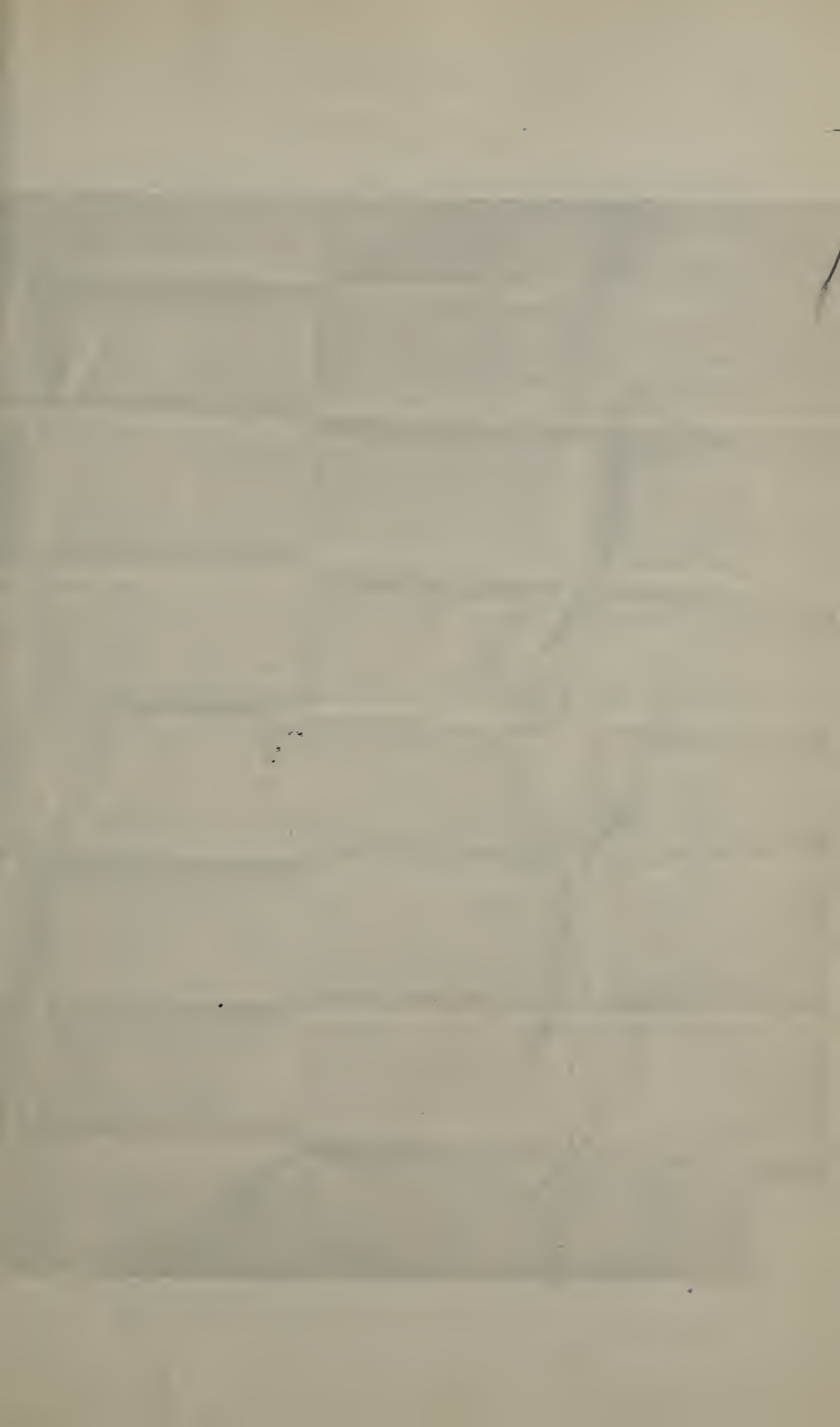
M. CAMPBELL BROWN

Witnesses:

JNO. CROWELL, JR.,

W. E. DONNELLY.

(Endorsed:) Opened by order of Court and re-filed April 14, 1890. L. S. B. Sawyer, Clerk, by F. D. Monckton, Deputy Clerk.





Caption to Depositions.

In the Circuit Court of the United States for the Ninth Judicial Circuit, in and for the District of California.

STANDARD OIL COMPANY, Complainant,
vs.
 SOUTHERN PACIFIC COMPANY *et al.*, Respondents. } In Equity.
 } No. 10,575.

Be it remembered, that on the sixteenth day of December, A. D. 1890, and on the several days thereafter to which the examination was regularly adjourned, as hereinafter set forth, at my office, room 57, in the United States Appraiser's Building, on the northeast corner of Washington and Sansome streets, in the City and County of San Francisco, State of California, before me, S. C. Houghton, Examiner in Chancery, of the Circuit Court of the United States for the Ninth Circuit and District of California, personally appeared the several witnesses whose names are hereinafter set forth, who were produced and examined on behalf of the respective parties to the above entitled cause.

J. H. Miller, Esq., and Gordon Blanding, Esq., appeared as counsel on behalf of complainant, and John L. Boone, Esq., as counsel on behalf of respondent.

Following is a record of the proceedings:

91

TUESDAY, December 16, 1890.

Present: Mr. Miller and Mr. Blanding, of counsel for complainant; Mr. Boone, of counsel for respondents.

(Complainant introduces in evidence Patent Office copy of specification and drawings of United States Letters Patent No. 216,506, granted June 17, 1879, to M. C. Brown for improvement in oil cars. Marked "Complainant's Exhibit A." Said Patent Office copy is received in evidence subject to no objections except such as might be urged to the original patent.)

Examination-in-chief of GEORGE W. UEFFINGER on behalf of complainant.

By Mr. MILLER:

Q. 1. State your name, age, place of residence and occupation?

A. My name is George W. Ueffinger, my age twenty-four years, I reside in San Francisco, and am by occupation a draughtsman.

Q. 2. By whom are you employed as a draughtsman?

A. W. H. Smyth.

Q. 3. What kind of drawings have you been accustomed to make?

A. Most all kinds of drawings, mechanical, and Patent Office drawings, and so forth.

Q. 4. How long have you been engaged in making
92 mechanical drawings?

A. About six or seven years.

Q. 5. I will show you a drawing now, and ask you if you ever saw that drawing before?

A. Yes, sir; I have.

Q. 6. Do you know who made that drawing?

A. I made that drawing.

Q. 7. From what did you make that drawing?

A. Well, from sketches taken by myself of an original car.

Q. 8. Where was the car?

A. At the corner of Fourth and Townsend streets, in this city.

Q. 9. Do you know in whose place it was?

A. It was on the track of the Southern Pacific Company.

Q. 10. About when was it that you took those sketches?

A. I should think about two years ago—a year or two years. It was either last winter or the winter before that.

Q. 11. You don't remember the exact date?

A. No, sir.

Q. 12. Does that drawing correctly represent that car from which you took the sketch?

A. Yes, sir. That is, approximately, to scale.

Q. 13. Is this drawing made to a scale?

A. Yes, sir.

Q. 14. What does Figure 1 of this drawing represent?

A. That represents a sectional elevation of the car.

Q. 15. What does Figure 2 of the drawing represent?

A. Figure 2 represents a cross-section of Figure 1.

Q. 16. What does Figure 2 represent?

A. It represents the cross-section taken through what they call the partition in the car, showing the construction
93 of it.

Q. 17. At what point of Figure 1 is the cross-section, Figure 2, taken?

A. On the line A B.

Q. 18. What does Figure 3 represent?

A. Figure 3 represents a cross-section in detail of the tank in the car.

Q. 19. What is the portion of the drawing marked "Cylindrical Dome" in this figure intended to represent?

A. It represents the dome or top of the tank; the supply dome, where they fill the tank.

Q. 20. What is the device marked "Valve Rod?"

A. That is used for emptying the tank.

Q. 21. What does that rod connect with?

A. That connects with a valve at the lowest extremity of the tank; an outlet valve.

Q. 22. What does Figure 4 of this drawing represent?

A. Figure 4 represents a section and plan of Figure 1, through CD.

Q. 23. What are those devices marked "Braces," shown in Figure 4?

A. They are angular pieces connecting opposite points of the tank, for strength and stability.

Q. 24. What were they made of?

A. They were made of angle iron.

Q. 25. What was the tank itself made of?

A. It was made, I suppose, of boiler iron.

Q. 26. What does Figure 5 of this drawing represent?

94 Figure 5 represents a perspective view of detail in construction.

Q. 27. What portion of the construction?

A. Of the corner of partition in the car; both a corner and one portion of it.

Q. 28. That Figure 5 shows two timbers joined together. How are they joined together?

A. They are mortised and tenoned.

Q. 29. Now, what does Figure 6 of this drawing represent?

A. Figure 6 represents a perspective view in detail of a similar portion of the car.

Q. 30. How many pieces do you find in that figure?

A. Represented in Figure 6 there are only two pieces.

Q. 31. How are those two pieces secured together?

A. They are secured together by common nails, small nails.

Q. 32. How many compartments did you find in that car down there?

A. There are three compartments.

Q. 33. How were they situated relatively to each other?

A. Well, the central compartment is occupied by an oil-tank, and there was an empty compartment at each end of the car.

Q. 34. Did you find anything in those two end compartments?

A. No, sir.

Q. 35. How were those end compartments separated from the tank compartment?

A. By this partition.

95 Q. 36. Which figure in this drawing shows that partition?

A. Figure 1 and Figure 2. I think Figure 4 shows it best.

Q. 37. How was that partition constructed, if you remember?

A. The sides were constructed of tongue and grooved boards, nailed to uprights which were mortised and tenoned into the cross-pieces in the top and bottom of the car.

Q. 38. How many upright pieces were there?

A. There were two in the center and one on each side, in each partition.

Q. 39. How were the two in the center constructed and placed in the car?

A. They were let in at the top and bottom in grooves.

Q. 40. Is that method shown in detail in Figure 5 of this drawing?

A. Yes, sir.

Q. 41. Now, how were the two side pieces of the partition constructed, if you remember?

A. The corners were taken off so as to make the boards flush, and they were nailed together.

Q. 42. Did you see any of the cross-boards taken off while you were there?

A. Yes, sir; I think there was one taken off.

Q. 43. Where was the one taken off, if you remember?

A. At the top of the car, which gave a view of the place where the central uprights were joined in with the cross-pieces at the top.

Q. 44. What was the shape of that tank?

A. It was a rectangular shape.

96 Q. 45. How was its bottom constructed?

A. Its bottom was sloping somewhat—sloping slightly.

Q. 46. How did it slope, in what direction?

A. It sloped towards the center, as shown in Figure 1 of the drawing.

Q. 47. Where was the outlet for emptying the tank located?

A. It was somewhat near the center and at the bottom of the tank.

Q. 48. Is that discharging device shown at the bottom of the tank in Figure 1 of the drawing?

A. It is, and also in Figure 4.

Q. 49. How was the tank filled?

A. The tank was filled from the top of the car, the top of the tank being open.

Q. 50. Does the top portion of this drawing in Figure 1 correctly represent the device for opening and filling the tank?

A. For filling it; yes sir.

(The drawing above referred to is introduced in evidence by complainant, and marked "Complainant's Exhibit B.")

Q. 51. Now, Mr. Ueffinger, I will show you another drawing and ask you if you know who made that drawing?

A. Yes, sir.

Q. 52. Who did?

A. I made that drawing.

Q. 53. From what did you make it?

A. From sketches made by me of an original car that was on the corner of Fourth and Townsend streets standing on the track of the Southern Pacific Company, about a year ago.

Q. 54. Was it made about the same time that the drawing "Exhibit B" was made?

A. Yes, sir.

Q. 55. Then there were two cars there, one represented by the drawing "Exhibit B," and one by the drawing I now show you?

A. Yes, sir.

Q. 56. Does this drawing correctly represent the car from which you made the sketch at that time?

A. Yes, sir.

Q. 57. Now, what does Figure 1 of this drawing represent?

A. Figure 1 of this drawing represents a sectional elevation of the car.

Q. 58. What does Figure 2 represent?

A. Figure 2 represents a cross-section of Figure 1.

Q. 59. Through what point of Figure 1 is Figure 2 taken?

A. Through the line AB on Figure 1.

Q. 60. What does Figure 3 represent?

A. Figure 3 represents the detail of the oil-tank in the same car.

Q. 61. What does Figure 4 represent?

A. Figure 4 represents an open plan of Figure 1.

Q. 62. Will you please describe in general terms the construction of that car which is represented in this drawing?

A. The car is built like an ordinary passenger car, open car, with an oil-tank rigidly fastened in the center, and with the compartments open, and with a compartment on each end of the car.

Q. 63. What was the shape of the oil tank?

A. The oil-tank was cylindrical in shape.

Q. 64. How was it placed in the car?

A. It was placed in the center of the car, between the top and bottom.

Q. 65. How was it kept in place?

A. It was kept in place by bands fastened around the tank to the bottom of the car, and by timbers at the base.

Q. 66. How were those timbers that you refer to attached?

A. They were fastened to the bottom of the car.

Q. 67. Are those timbers shown in this drawing?

A. Yes, sir; in Figures 1, 2, 3 and 4.

Q. 68. Did those timbers extend across the car?

A. Yes, sir; across the bottom of the car.

Q. 69. At each end of the oil tank?

A. Well, at each end, and between.

Q. 70. Where was the discharge opening in this tank for letting out the oil?

A. The discharge opening was at the bottom of the tank, near the center.

Q. 71. And where was the filling opening?

A. At the top of the tank.

Q. 72. Do you remember about the relative proportions of the central compartment containing the oil tank and the end compartment?

A. The central compartment was somewhat longer than either of the end compartments.

Q. 73. What kind of merchandise were the end compartments adapted to carry?

A. Well, I should think almost any kind.

99 Q. 74. Well, would it carry oil in bulk?

A. No; anything but oil.

Q. 75. Where was the oil carried?

A. The oil was carried in the center in the tank.

(The drawing last above referred to was introduced in evidence by complainant, and marked "Complainant's Exhibit C.")

Cross-examination of GEORGE W. UEFFINGER.

By Mr. BOONE:

X.-Q. 1. Who employed you to make these drawings?

A. The Standard Oil Company, through Mr. Miller.

X.-Q. 2. Who employed you, the Standard Oil Company or Mr. Miller?

A. Mr. Miller employed me.

X.-Q. 3. Did anybody accompany you down to the depot when you made those drawings?

A. Mr. Miller did.

X.-Q. 4. Who pointed out the car to you?

A. Mr. Miller.

X.-Q. 5. Who pointed out to you the parts of the car that he wanted shown by the drawings?

A. Mr. Miller pointed them out.

X.-Q. 6. Did he tell you how he wanted the drawings made?

A. He told me what he wanted shown, and I made the drawings according to what would best show those parts.

X.-Q. 7. Did he tell you what views of them he wanted shown?

100 A. He told me about some of the views that he wanted.

X.-Q. 8. Did he take any of the parts of the car to pieces while you were there?

A. Yes, sir.

X.-Q. 9. How did he do that?

A. I don't know whether it was with a hammer— Well, I think it was a hammer and cold chisel I think he used.

X.-Q. 10. He did use a hammer and cold chisel, did he?

A. Yes, sir.

X.-Q. 11. What part of the car did he take apart?

A. A part of the cross-partition in the car.

X.-Q. 12. How much of the partition did he take down?

A. One board, one cross-board.

X.-Q. 13. Where was that board, at the top or bottom?

A. It was at the top of the car.

X.-Q. 14. How many cars were there in the depot at that time?

A. I couldn't tell. There were those two cars that I sketched, and quite a number of others.

X.-Q. 15. Were any of the others oil cars?

A. I don't remember.

X.-Q. 16. Did you examine any of the other cars?

A. No, sir.

X.-Q. 17. Now, in your examination-in-chief, you used the term "loose partition." What did you mean by that term?

A. The partition that could be easily taken apart and replaced—a removable partition.

X.-Q. 18. You didn't mean to imply that it was a loose partition, that it was loose in the car?

101 A. It was loose in the car; yes, sir.

X.-Q. 19. How do you know it was loose?

A. By seeing the construction of it.

X.-Q. 20. Did you take any of it down that was loose?

A. No; we didn't take anything apart.

X.-Q. 21. You say you did take out one plank of the partition?

A. Well, that wasn't loose; that was fastened.

X.-Q. 22. Now, how do you know the others were loose if you didn't take them out?

A. Well, that is, they were not rigidly connected.

X.-Q. 23. Were they not nailed?

A. They were nailed.

X.-Q. 23. Then they were not loose, were they?

A. Well, I couldn't swear that the whole thing was loose.

X.-Q. 24. Then, when you used the term "loose partition," you used that term at random, didn't you?

A. Well, I might employ "loose" in another way to illustrate my idea of it.

X.-Q. 25. That is what your idea of "loose" is?

A. Well, anything that is usually portable or changed.

X.-Q. 26. A thing that is nailed up with nails, do you call that loose?

A. No.

X.-Q. 27. Well, you say these partition planks were nailed, were they?

A. Yes, sir; they were nailed.

X.-Q. 28. Then in that sense they were not loose?

102 A. They were not loose, but the cross-pieces to which they were nailed might have been loose.

X.-Q. 29. Didn't you testify that the cross-pieces to which they were nailed were tongued and grooved together?

A. Yes, sir.

X.-Q. 30. Well then, in that connection, what did you mean by the term "loose"?

A. A thing that can be easily transformed or changed, taken apart.

X.-Q. 31. The grooves were in the longitudinal timbers of the car frame, were they not?

A. Yes, sir.

X.-Q. 32.—The tenons of the uprights fitted up into the grooves, didn't they?

A. Yes, sir.

X.-Q. 33. Now, in order to remove that timber or post you would have to raise and displace the longitudinal timbers of the car frame, wouldn't you?

A. No.

X.-Q. 34. How else would you displace it?

A. There was a space provided between the top connection and the base connection to allow for the lifting of the uprights when the cross-pieces were taken away.

X.-Q. 35. Please explain that more fully, so that we can understand what you mean by that description?

A. Well, the uprights were tenoned or fitted in the slots or mortises at the top and base cross-pieces of the car, and they fitted in there loosely, so that when the cross-pieces to which they were nailed that formed the partition were taken away these uprights could be either raised or lowered a little so that either the top or bottom would come up a little and
103 could be taken out.

X.-Q. 36. But the uprights would have to be raised the full length of the tenon, wouldn't they?

A. The full length of one tenon, yes, sir.

X.-Q. 37. Then that is what you mean by "loose?"

A. Yes, sir.

X.-Q. 38. That is, that the upright post which had a tenon at each end fitting into mortises in the timbers, was not nailed, or in any otherwise fastened, except held by the tenons?

A. Held by the tenons simply.

X.-Q. 39. Before the timbers could be removed the side-boards, or boards of the partition, would have to be knocked off?

A. Yes, sir.

X.-Q. 40. And that would require a hammer, and force, and cold chisel?

A. Yes, sir.

X.-Q. 41. What proportion of the length of the car did the oil-tank occupy?

A. The center of the car, between the end compartments.

X.-Q. 42. What proportion of the length of the car?

A. A little over one-half the length.

X.-Q. 43. The oil-tank then occupied a little over one-half the entire length of the car?

A. It occupied a little over one-third of the full length of the car.

X.-Q. 44. The dome shown in Figure 1 of the drawings, Exhibits "B" and "C," forms a part of the tank, don't it?

A. Yes, sir.

104 X.-Q. 45. It was simply a small section or portion which extended up through the top of the car?

A. Yes, sir.

X.-Q. 46. And formed actually a part of the tank?

A. Yes, sir.

X.-Q. 47. How long was the car?

A. The ordinary length of a freight car.

X.-Q. 48. Well, about how long was that?

A. Somewhere between thirty and thirty-five feet long.

X.-Q. 49. How long was the oil-tank?

A. Well, a little over one-third of the length. I suppose about twelve feet or so.

X.-Q. 50. How wide was the car?

A. Between six and seven feet—seven feet, I think.

X.-Q. 51. Were the end compartments of the car closed in?

A. Yes, sir.

X.-Q. 52. There were doors, were there, as shown in Figure 1 of the drawing, "Exhibit B?"

A. Yes, sir.

X.-Q. 53. What was the size of those doors?

A. They were between five and five and a half feet wide, and about six feet high.

X.-Q. 54. Was it possible to take that tank out through these doors of the car?

A. No, sir.

X.-Q. 55. How could the tank be removed from the car if it was desired to remove it?

A. Take out the end of the car, I suppose.

X.-Q. 56. You would have to tear the car to pieces, wouldn't you, to take the tank out?

105 A. A portion of it.

X.-Q. 57. Suppose those end partitions you spoke of at the end of the tank were removed, could you take that tank out of the car without destroying the car otherwise?

A. No, sir.

X.-Q. 58. What was the object of these partitions?

A. To separate the merchandise from the tank, when the tank was in place.

X.-Q. 59. You say the tank extended up through the top of the car?

A. The inlet to the tank, I mean.

X.-Q. 60. The dome, you mean?

A. Yes, sir.

X.-Q. 61. And the dome, you testify, is a part of the tank?

A. The dome need not necessarily be there for that purpose.

X.-Q. 62. Well, it is a fact, isn't it?

A. It is a portion of the tank.

X.-Q. 62½. And that portion of the tank extended clear through the top of the car, didn't it?

A. Yes, sir; through the top.

X.-Q. 63. And the filling opening was made in the top of this dome, wasn't it?

A. There was a cover to the top of the dome.

X.-Q. 64. Well, the opening through which the tank is filled is through this dome, isn't it?

A. Yes, sir.

X.-Q. 65. Entirely above the top of the car?

A. Above the roof of the car; yes, sir.

X.-Q. 66. This dome extended through the top of the car, through the roof of the car, and had an opening in its top?

106 A. Yes, sir.

X.-Q. 67. And that had a cover on it?

A. Yes, sir.

X.-Q. 68. And by removing this covering the tank could be filled?

A. Yes, sir.

X.-Q. 69. The top of the tank, as shown in the drawing "Exhibit B," was flat, was it not?

A. Yes, sir; it was flat.

X.-Q. 70. The tank in the car, shown by drawing "Exhibit C," was cylindrical, you say?

A. Yes, sir.

X.-Q. 71. Formed a complete cylinder?

A. Yes, sir.

X.-Q. 72. And the dome formed a portion of the tank, didn't it?

A. Yes, sir.

X.-Q. 73. And extended through the roof of the car, as in the other case?

A. Yes, sir.

X.-Q. 74. Did you find any partitions then in that cylindrical tank car?

A. No, sir.

X.-Q. 75. And the same condition as to size of tank, and size of openings, and removal of the tank, would apply to that car as to that shown in the drawing "Exhibit B," wouldn't it?

A. Yes, sir.

X.-Q. 76. Now, referring to the drawing "Exhibit C," which represents the cylindrical oil tank, how many compartments did you find in that car?

A. Only one compartment.

X.-Q. 77. One compartment with an oil tank in the middle?

A. Yes, sir.

X.-Q. 78. In the car which is represented by the drawing "Exhibit B," how many compartments did you find?

A. Three.

107 X.-Q. 79. You found a central compartment and two end compartments?

A. Yes, sir.

X.-Q. 80. Did you find any oil tank in those compartments?

A. No sir.

Re-examination of GEORGE W. UEFFINGER.

By Mr. MILLER:

R.-Q. 1. In the car represented by the drawing "Exhibit C," what was the size of these heavy timbers running across the bottom of the car and separating the oil tank from the dry merchandise compartment?

(Question objected to by respondents, as not proper re-examination.)

A. Well, they were about ten inches deep and about seven or eight inches wide. The end ones didn't reach across the car.

R.-Q. 2. How were they secured to the bottom of the car?

Mr. BOONE: That question is objected to, as not proper re-examination upon any matter drawn out upon cross-examination.

A. They were fastened with bolts running through the bottom.

R.-Q. 3. What was the object of those timbers?

(Question objected to by respondents on the grounds last above stated.)

108 A. To keep the tank in place.

R.-Q. 4. Could those timbers be removed?

(The same objection by respondents.)

A. Yes, sir.

R.-Q. 5. Now, what were the two end compartments in that car represented by the drawing "Exhibit C" adapted to convey or transport?

Mr. BOONE: That question is objected to as incompetent, on the ground that no foundation has been laid to show that this witness is competent to testify on that matter.

A. Merchandise, other than oil and other fluids.

R.-Q. 6. What kind of merchandise was adapted to be carried in the tank?

(The same objections by respondents.)

A. Oil, water, and things of that nature.

R.-Q. 7. Now, when the tank was filled with oil and the two end compartments were filled with other kind of merchandise, as you have testified to, how many compartments would there be in that car represented by the drawing "Exhibit C"?

A. There were two merchandise compartments and one oil compartment.

R.-Q. 8. You couldn't carry oil in bulk in the merchandise compartments, could you?

A. No, sir.

R.-Q. 9. Now, in the car represented by the drawing "Exhibit B," what do you find to the shape of the top of the dome which you have testified was a part of the tank. Just look at the drawing and see what the shape of this dome is?

109 A. Cylindrical shape, with a convex top.

R.-Q.10. Where is the filling-in opening located?

A. In the center of that dome at the top.

R.-Q. 11. How is the top of the dome shaped, from each side of the filling-in opening to the upright sides of the dome?

A. Well, it rises from the ends to the center.

R.-Q. 13. From which end do you mean it rises?

A. From the outside of the dome to the center, it rises at the top.

R.-Q. 14. At what angle?

A. At a slight angle.

R.-Q. 15. As shown in Figure 1 of this drawing "Exhibit B," it is correctly represented, is it not?

A. Yes, sir.

R.-Q. 16. Referring to Figure 2 of the drawing "Exhibit B," I will ask you how the two inside upright pieces to which the cross-boards are attached, are attached at their bottoms?

A. In a similar way as they are at the top.

R.-Q. 17. Well, what do they rest on at the bottom?

A. On a cross-piece laid on the floor.

R.-Q. 18. Could those cross-pieces be readily removed?

A. Yes, sir; the bottom one could.

R.-Q. 19. Now, when you removed the bottom one, how would that help to facilitate, if at all, the removing of the partition?

A. You could take off the partition more readily then.

R.-Q. 20. Suppose you were to take the nails out of the cross-pieces at the two sides, and still leave the boards nailed to the two inside cross-pieces, and then remove the bottom
110 cross-piece in which the two inside uprights are attached, could you remove the whole partition then?

A. Yes, sir.

R.-Q. 21. In that case, then, it would not be necessary to take off each board, one by one, would it?

A. No, sir.

Re-cross-examination of GEORGE W. UEFFINGER.

By Mr. BOONE:

R.-X.-Q. 1. Did you see any of those timbers removed that kept the tank in place?

A. No, sir.

R.-X.-Q. 2. Then how do you know that it could be removed without injuring the car?

A. Well, they are either bolted there or nailed, and anything that is bolted can be easily loosened.

R.-X.-Q. 3. Well, which were they, bolted or nailed?

A. They were very small pieces, and they must have been nailed.

R.-X.-Q. 4. Did you examine them, to know whether they were nailed or not?

A. No, sir.

R.-X.-Q. 5. As a matter of fact, you don't know how they were fastened to the car, do you?

A. No, I didn't observe that.

R.-X.-Q. 6. Then, as a matter of fact, you don't know whether they could be removed without injuring the car or not, if you don't know how they were fastened?

A. Well, their removal would slightly injure the car.

111 R.-X.-Q. 7. There is no question about that, under any circumstances, is there?

A. No, sir.

R.-X.-Q. 8. Now, did you ever see one of those ears in practical use?

A. No, sir.

R.-X.-Q. 9. Then how do you know that the car could be used for hauling freight other than oil in those end compartments?

A. Well, they were adapted from appearances to contain merchandise other than oil.

R.-X.-Q. 10. Nothing to prevent your carrying oil in those compartments, is there, if you wanted to?

A. No, sir.

R.-X.-Q. 11. Any tank that would be small enough to go through the door of those compartments could be carried in the compartments, couldn't it, even if filled with oil?

A. Yes, sir.

R.-X.-Q. 12. Now, I will ask you if in both of those cars the oil tank, which was fitted and secured in the car, did not form a permanent part of the car in each case?

A. It did not.

R.-X.-Q. 13. Well, you say they could not be removed without tearing the car partly to pieces?

A. Well, they were fastened to the car.

R.-X.-Q. 14. Well, you couldn't take them out through the door of the car, could you?

A. No, sir.

R.-X.-Q. 15. You would have to tear a part of the car down in order to get that tank cut, wouldn't you?

A. Yes, sir.

R.-X.-Q. 16. Then, as a matter of fact, were not the tanks in each case a permanent part of the car?

A. They were evidently fastened to it.

112 R.-X.-Q. 17. They were not intended to be taken out through the doors, were they?

A. No, sir.

R.-X.-Q. 18. They were not intended to be removed to any other portion of the interior of the car, were they?

A. Well, they might be moved.

R.-X.-Q. 19. Were they intended to be, by the construction and arrangement of the car?

A. No, sir.

R.-X.-Q. 20. The car was so constructed that the tank in each case was secured at that particular point, was it?

A. Yes, sir.

R.-X.-Q. 21. And they were secured by connection with the top of the car, were they not?

A. Yes, sir.

R.-X.-Q. 22. So that when they were there in place as a carrying tank for carrying oil they formed a permanent part of the car, didn't they?

A. Yes, sir.

(It is stipulated and agreed, by and between counsel for the respective parties herein, that the reading of the above deposition to the with and the signing of the same by him, respectively, are waived.)

Examination-in-chief of LEWIS PETERSON, on behalf of complainant.

By Mr. MILLER:

Q. 1. State your name, age, place of residence and occupation.

113 A. My name is Lewis Peterson; my age fifty-three years; I reside in San Francisco, and I am by occupation a model-maker.

Q. 2. I believe you are engaged in making Patent Office and other models, are you not?

A. Yes, sir; I am.

Q. 3. How long since you have been engaged in that business?

A. Oh, regularly; for fifteen or sixteen years, but off and on for twenty years.

Q. 4. I now produce a tin model, and ask you if you know who made that model?

A. Yes, sir; I made that model.

Q. 5. When did you make it, recently?

A. Oh, yes; recently—within a couple of weeks.

Q. 6. From what did you make the model?

A. I made the model from a blue print.

Q. 7. Look at the drawing, "Exhibit B," and state whether or not it was a blue print of that drawing?

A. Yes, sir; I made it from a blue print of the drawing "Exhibit B."

Q. 8. Is this model made to correctly represent the device shown in the drawing "Exhibit B?"

A. Yes, substantially. There are a few little matters in de-

tail that are not carried out. In one of the partitions in this model the cross-boards are nailed on part of the way up on one end, and only part of the way up on the other.

Q. 9. What was the object in having the model only partially completed?

A. Well, it seemed unnecessary to build it up complete.

(The model above referred to is here introduced in evidence by complainant, and marked "Complainant's Exhibit 114 D.")

Cross-examination of LEWIS PETERSON.

By Mr. BOONE:

X.-Q. 1. This model is a correct model of the car represented by the drawing "Exhibit B," is it?

A. Yes, sir; substantially.

X.-Q. 2. Were any instructions given you outside of the drawings which you followed in making the model?

A. Well, nothing further than that Mr. Miller explained to me the particular parts that he wanted shown; that it was not material that the car itself should be constructed exactly as regards details.

X.-Q. 3. I notice, Mr. Peterson, that the top of the tank in the model is inclined. You heard the testimony of the witness Ueffinger to the effect that the tank represented by the drawing was flat on top, did you?

A. Yes, sir.

X.-Q. 4. In that particular then the model is not like the drawing, is it?

A. No, sir. It is shown on the drawing as being perfectly flat.

X.-Q. 5. Now, in that particular then the model does not represent the tank shown in the drawing, does it?

A. No, sir; in that particular it does not. It makes the metal a little stiffer to slant it that way.

X.-Q. 6. That was intended to be perfectly flat, was it?
115 A. Yes, sir; it evidently was, by the drawing.

X.-Q. 7. I notice that the oil tank is higher at one end than the other in this model. Was that intentional?

A. Yes, sir; I made it intentionally that way.

X.-Q. 8. Does the drawing represent a tank which is higher at one end than at the other?

A. No, sir. The tank is not intended to be higher at one end than at the other. The ends are both higher, the center is the lowest part of the tank.

X.-Q. 9. I mean the height of the tank is greater at one end than at the other?

A. Oh, is it? I didn't know it was. It is intended to be the same.

X.-Q. 10. A perfectly square tank?

A. Well, with this exception, that the bottom inclines to the center.

X.-Q. 11. But, I am speaking of the side of the tank?

A. Yes, sir; it is intended to be square.

X.-Q. 13. And with a perfectly flat top?

A. Yes, sir.

X.-Q. 14. That swell on the top as shown in the model then, was accidental, was it?

A. Yes, sir.

X.-Q. 15. And the difference in the height of the two ends of the tank was simply an accident?

A. Yes, sir.

X.-Q. 16. And not intentionally made that way to show the tank with an inclined top?

A. No, sir.

(It is stipulated and agreed, by and between counsel for the respective parties herein, that the reading of the above
116 deposition to the witness, and the signing of the same by him, respectively, are waived.)

Examination-in-chief of CHARLES A. WATSON on behalf of complainant.

By Mr. MILLER:

Q. 1. State your name, age, place of residence and occupation.

A. My name is Charles A. Watson, my age is thirty-nine years, I reside in Oakland, California, and am by occupation clerk for the Standard Oil Company in San Francisco.

Q. 2. How long have you been in the employ of The Standard Oil Company, complainant?

A. For seven years last past.

Q. 3. At what place have you been stationed during those seven years?

A. The first of those years in Salt Lake City, and the remaining six years of the time in San Francisco.

Q. 4. With what company were you employed prior to that time?

A. The Standard Oil Company of Cleveland, Ohio.

Q. 5. And where were you located during those years?

A. At New York City.

Q. 6. What has been your general duties during the last six or seven years, since you have been employed by the Standard Oil Company of Iowa at this place? In regard to the trans-

portation of their oils? What have you had to with that branch of their business?

(No answer.)

117 Q. 7. I will withdraw that question and put it in another form. Where has the Standard Oil Company been bringing their oils from that have been sold on this coast?

A. From the Eastern States; some from Ohio and some from Pennsylvania.

Q. 8. In what general class of cars have they been brought? What do you call those cars?

A. There are two kinds, a cylinder car and a patent car.

Q. 9. Which car do you refer to when you say the patent car?

A. I refer to a car similar to that shown in the patent "Exhibit A."

Q. 10. You have examined this patent "Exhibit A," have you before?

A. Yes, sir.

Q. 11. I will just hand it to you now, and ask you whether or not you understand the construction of the car shown in that patent?

A. I do.

Q. 12. Will you just explain briefly the object and purpose of that car, as shown in that patent "Exhibit A?"

Mr. BOONE: We object to that question as incompetent, on the ground that no proper foundation has been laid for such testimony.

Mr. MILLER: I will withdraw the question.

Q. 13. What have you had to do, Mr. Watson, with the receiving of the oils at this point on behalf of the Standard Oil Company that were brought from the East?

A. I have instructed the unloading of the cars and
118 placing them on the switches.

Q. 14. Have you seen any of the cars?

A. I have seen nearly every car.

Q. 15. Have you seen those cars being unloaded, Mr. Watson?

A. Yes, sir.

Q. 16. How were they unloaded?

A. By attaching a piece of hose at the outlet at the lower side of the car.

Q. 17. What did you do after you attached the hose?

A. You raise the valve and start the pump.

Q. 18. Just continue then, and describe the whole process of unloading the oil from the tank?

A. Well, that is all; after you attach the hose, start your pump and raise your valve, the oil all runs out of the car

through that outlet. The hose, understand, is not let run on the ground; it is attached to another pipe to go into other storage tanks. In starting the pump, you must know that the pump is attached to a pipe, or the oil never would get there.

Q. 19. And where is the oil carried to from the tank?

A. To an iron pipe and then to the pump and then to the storage tank.

Q. 20. Are those storage tanks large or small?

A. They are of about twenty-four thousand gallons capacity each.

Q. 21. And about what is the capacity of the oil tanks used on these compartment cars which you have referred to?

A. From four to five thousand gallons. The capacity of the whole car.

119 Q. 22. Yes, I mean the oil-tank.

A. The capacity of the tanks in the car are from four to five thousand gallons. They vary.

Q. 23. What other kinds of cars do you know of for transporting oil in bulk besides these compartment cars?

(Question objected to by respondents, as immaterial and irrelevant.)

A. Boiler cars.

Q. 24. What do you mean by "boiler cars?" Just describe that briefly?

A. A plain cylinder laid on a flat car, of about six feet diameter and twenty-five feet long. They vary in size also.

Q. 25. How long have you known of cars of that description.

A. Eighteen years.

Mr. BOONE: Strike out my objection. I thought I was on the other side.

Q. 26. Were those cars adapted to carry dry merchandise?

A. No, sir.

Q. 27. Are those patent cars that you refer to as shown by the patent "Exhibit A," adapted to carry dry merchandise.

A. Yes, sir.

By Mr. BLANDING:

Q. 28. In the tank-car of which you have spoken, Mr. Watson, did or not the tank take up the entire capacity of the the car?

A. Have you reference to the boiler car?

Q. 29. Yes, the boiler-tank car.

120 A. It takes up the entire capacity of the car.

Q. 30. So that in that class of cars there was no room left for freight?

A. None, whatever.

Q. 31. Other than the liquid?

A. That is all.

By Mr. MILLER:

Q. 32. Now, Mr. Watson, I will ask you whether or not there is any advantage in using cars constructed like the patent "Exhibit A" in bringing oil from the Eastern States to the Pacific Coast, over using the boiler-tank cars which you have just described, and if there is any advantage, what is it?

Mr. BOONE: I object to that, as incompetent and immaterial, on the ground that no proper foundation has been laid for such testimony from this witness, it not being shown that he is sufficiently familiar with the business of transporting oil in cars to testify in regard to that matter.

A. There is considerable advantage. You can bring bulk goods in one direction, and carry back dry merchandise in the other, thereby having the car always in use and earning something. Otherwise, as in the case of the boiler car you would have to pay ninety-five dollars charges for taking back the empty car. This ninety-five dollars is the tariff of the railroad for such service.

Q. 33. Now, to whom do these oil-cars generally belong, to the railroads or to the importers?

A. To the importers.

Q. 34. To whom do the patent cars belong that the Standard Oil Company have been using?

121 Mr. BOONE: We object to that, as incompetent, not the best evidence.

A. They belong to The Standard Oil Company.

Q. 35. Which is the best and cheapest way to transport oil, Mr. Watson, in bulk or in cases or cans?

Mr. BOONE: We object to that as incompetent, on the ground that the witness has not been shown to be sufficiently versed in that matter to testify in regard to it.

Q. 36. I will withdraw that question temporarily, and ask you, Mr. Watson, what you have had to do and what you know concerning the methods of transporting oils, and what experience you have had in that regard?

A. Well, I have been in the oil business for nineteen years, with the exception of four of them. I have been associated with the shipping of oil in packages and in bulk, both on the East and on the West Coast of this continent, for all that time.

Q. 37. Now, I will repeat the other question, then, and ask you which is the preferable way of transporting oil over long distances, in packages or in bulk?

A. In bulk.

Q. 38. Why? Just answer in general terms. We don't want to go into details. Which is the cheaper way?

A. It saves in transportation of the package, and brings the oil cheaper to consumers.

By Mr. BLANDING:

Q. 39. Hasn't it been for years among oil men an object to procure some in destructible package to carry oil?

(Question objected to by respondents as leading.)

A. Yes, sir.

Q. 40. Has such a package been found?

A. The nearest to it is this patent car.

Q. 41. You mean the patent car of The Standard Oil Company?

(Question objected to by respondents as leading.)

A. Yes, sir.

By Mr. MILLER:

Q. 42. What difficulties were experienced by dealers and shippers of oil in shipping it in packages?

A. Excessive leakage.

Q. 43. Do you know whether or not The Standard Oil Company were endeavoring to perfect other methods also in transporting oil in that way?

Mr. BOONE: That question is objected to as incompetent and immaterial, and as leading.

A. I don't think I could answer that question. I don't believe I know. The natural presumption would be that they were.

Q. 44. About how much is a load of oil as carried by one of your patent cars?

A. Twelve tons.

Q. 45. What is the carrying capacity of the dry merchandise compartment in those cars?

A. About twelve tons.

Q. 46. In carrying back the boiler-tank cars, I understood you to say the shipper had to pay for hauling them back, is that right?

A. Yes, sir.

Q. 47. Now, in carrying back these patent compartment cars, I understand you to say that a tariff of ninety-five dollars, or about, was allowed for them by the railroad company, is that correct?

A. No, sir; they can load them and make them earn their freight.

Q. 48. Just explain what you mean by that. What can be

loaded? In utilizing these compartment cars for carrying dry merchandise back to the east what is the amount of saving to the owners of the cars?

By Mr. BOONE.

Q. 49. Do you know what the saving is?

A. They save the ninety-five dollars for transportation by having it a patent car over it being a boiler tank car. The railroad company can load it and send any merchandise they want to back in the car. That has nothing to do with the owner of the car—he has no choice in the matter.

By Mr. MILLER:

Q. 50. Now, if one of these patent cars went back empty what would be the charge for carrying it back in comparison with the boiler tank cars?

A. There is no charge on a patent car going back empty, if it goes back empty at all. It is optional with the railroad company to load it or send it back empty.

Q. 51. Then the railroad company takes it back free of charge to the company for the privilege of loading it with dry merchandise if they see fit?

A. That is evidently the practical result. I don't know whether it was their intention or ideas or not at the time such tariffs were made.

Q. 52. Now, just look at the patent "Exhibit A" 124 and explain briefly the construction of that car?

Mr. BOONE: We object to that as incompetent, no foundation having been laid to show that this witness is competent to testify in regard to the construction of the car described in the patent.

A. Gentlemen, I can describe the car that we have built after this patent, but I am no expert car builder. I can describe our cars as they are in use if you wish it.

Q. 53. Then, I will ask you this question: how many compartments do you find in the car shown in this patent?

Mr. BOONE: We object to that question as incompetent, the patent itself being the best evidence of what it shows.

A. There are three compartments, two to carry oil and one to carry dry merchandise.

Q. 54. Where is the compartment for carrying dry merchandise located relative to the others?

(The same objection by respondents.)

A. In the center of the car, the others being in the ends.

Q. 55. How do you find the floor of the two end compartments constructed in the drawing shown in this patent; are they flat or on an incline?

(The same objection by respondents.)

A. On an incline.

Q. 56. How do you find the bottom of the tanks constructed?

(The same objection by respondents.)

125 A. In counterpart thereto.

Q. 57. How do you find the tops of the tanks constructed?

(The same objection by respondents.)

A. With a slanting convex top to the loading point at the highest place in the tank.

Q. 58. Why do they have that loading point in the highest part of the tank?

(The same objection by respondents.)

A. So that the tank can be absolutely filled with oil, and so that any air that might be going with the oil through the pipes would get out; so that they can get the tank entirely filled.

Q. 59. Where do you find the drawing-off device in this tank located?

(The same objection by respondents.)

A. Directly under the filling point.

Q. 60. Can you state why it is located at that point, or whether there is any advantage in locating it at that point?

(The same objection by respondents.)

A. Because the lowest part of the tank in the car where the draw-off is, is always directly under the highest point in the top of the tank.

Q. 61. Why do you have the outlet at the lowest part of the tank?

(The same objection by respondents.)

A. In order to make perfect drainage.

Q. 62. How do you find the end compartments separated from the middle compartment in this patent?

126 The same objection by respondents.)

A. By movable partitions. In the instance of our car you simply take a wrench and unscrew a nut and remove your partitions. It cannot be done without some tool in your hand.

Q. 63. Now, Mr. Watson, I will ask you if you know anything about the firm of Whittier, Fuller & Company, bringing any oil cars over here from the East containing oil in them and having compartments for dry merchandise?

(Question objected to by respondents as leading.)

A. In the latter part of October, 1889, I found on the Southern Pacific Company's track a car marked "Bear Creek Star Line, No. 11, which car was consigned to Whittier, Fuller & Company of this city. That car looked like an ordinary box-

car, but it had a tank in the center and two compartments at each end of the car. In the latter part of April or May, 1890, I saw on the Southern Pacific Company's tracks two cars marked "Bear Creek Star Line, No. 13," and "15." They were consigned to the firm of Whittier, Fuller & Company, and those cars were similar in every respect to the one I have just referred to. There was an exception, however, to one of them, it having a cylinder tank instead of a square tank.

Q. 64. Did you examine those cars in May last, or about that time?

A. Yes, sir.

Q. 65. What was the occasion of your examining them?

A. By order of Judge Sabin's Court that they be brought here for examination by all parties interested.

Q. 66. Were those cars ordered to be brought from Mojave?

A. Yes, sir.

127 Q. 67. Who was with you when you examined this car?

A. A draughtsman, Mr. Ueffinger, who has appeared here as a witness, and Mr. Miller, counsel for complainant, and a laborer from the warehouse of the Standard Oil Company.

Q. 68. Now, I will show you this model "Exhibit D," and ask you how that model compares in general construction with one of those cars which you examined at that time?

A. Relative to the tank and the partitions and the compartments the proportions shown in the model are about as I remember the car. The tank had a slanting bottom set on a floor laid counterpart thereto. The partition was a movable partition. The top of the tank was also a trifle slanting towards the center, which is very easily accounted for, because they couldn't make a boiler tank of those dimensions and have the top perfectly flat and set the dome in the center. It would naturally be higher where the dome joined the main part of the tank, or else lower, but in this instance they had it braced up so it had a trifle slant from the center towards the ends on top.

Q. 69. How was the top of the dome in that respect?

A. The top of the dome was also slanting from the center to the eaves, being highest in the center.

Q. 70. Will you please look at this drawing "Exhibit B," and state how the construction of that car compared, in general terms, with this drawing?

A. It looks very much like it.

Q. 71. Did you hear Mr. Ueffinger's testimony regarding this drawing and the construction of the car, given a

128 little while ago?

A. Yes, sir.

Q. 72. Does that correspond with your recollection of what the construction of the car was?

A. No, sir; not in every particular.

Q. 73. Just state in what particular it does not?

A. Relative to the partition.

Q. 74. Just explain now the construction of the partition?

A. The partition was gained in at two stanchions where the doors were, so that the boards were flush, and simply nailed with an eight-penny nail to the outer door-post. The two middle stanchions that held the partition were simply mortised into a rafter of the car and blocked up underneath with a wedge.

Q. 75. Could that wedge be removed?

A. It was not fastened at all. By drawing the nails from the outer posts where the doors were, and knocking the wedge out with a hammer, the partition would fall right over on you. As it dropped the upper tenons of the middle posts out of the rafters then there was nothing to hold it.

Q. 76. Was there any portion of the partition removed while you were there?

A. Yes, sir.

Q. 77. What portion?

A. The top portion. We took off two boards to see how it was fastened.

Q. 78. How were those boards taken off?

A. With a simple hammer, by drawing the nails with the claw end.

Q. 79. What was the object in taking off those two boards?

129 A. So as to see the construction of the car.

Q. 80. After you had drawn those two boards off could you see into the center compartment on top of the tank?

A. I didn't look from that side of the car to the top of the tank.

Q. 81. Where did you look at the top of the tank?

A. From the top of the car through the man-hole of the car inside of the dome. It is very easy to look into that dome. It is four feet in diameter, pretty near. You could reach in there yourself and look under on the inside of the tank, and if the inside of the tank is slanting towards the center the outside certainly must be.

Q. 82. Was this car loaded with oil when it came here?

A. Oil, or gasoline, I don't know which, now.

Q. 83. Where was it unloaded, if you know?

A. At Whittier, Fuller & Company's warehouse, on Townsend street between Fourth and Fifth, in this city.

Q. 84. Can you state, or do you know, what the dimensions of the oil tank were as compared with the capacity of the dry merchandise compartments?

A. No, sir; I couldn't tell you that.

Q. 85. (Q. 84 repeated.)

A. The size of the tank was about twelve feet long. As to its capacity in comparison with the dry compartments, I don't know.

Q. 87. Do you know what the capacity of the tank itself was?

A. About six thousand gallons.

Q. 88. Do you know what the object was for having 130 the dry merchandise compartment?

A. Undoubtedly the same as in the patent of the Standard Oil Company, for saving the expense of hauling the car back empty.

Q. 89. Did that car accomplish, or did it not accomplish, the same object as was intended to be accomplished by the complainant's patent Exhibit A?"

Mr. BOONE: That is objected to as incompetent, no proper foundation having been laid to show that this witness is qualified to testify in regard to the matter inquired of.

A. Exactly the same.

Q. 90. What portion of that car did you find was of a different arrangement or construction from the patented car?

(The same objection by respondents.)

A. I found that the tank for carrying the bulk oil in this car was in the center and the dry compartments at each end; while in the patent cars of The Standard Oil Company the tank or tanks to carry the bulk oil are at the end of the car, and the compartment for dry merchandise is in the center. They were simply reversed.

Q. 91. Would that make any difference in the general purposes for which the cars were constructed?

(The same objection by respondents.)

A. Not a bit.

Q. 92. Do you remember where the discharge-cock was located in this Whittier and Fuller car?

131 A. At the lowest part in the bottom.

Q. 93. What was the object in having it located at the lowest point in the bottom?

A. To completely drain the car dry.

Q. 94. Do you know where the filling-in opening is located?

A. Directly above on top, at the highest point.

Q. 95. Why was it located at the highest point?

A. Undoubtedly so as to allow air to escape when it was filling, and to allow it to filled to its full capacity.

Q. 96. Did it accomplish that purpose?

A. Exactly.

Q. 97. Now, how did that car compare in general terms with

the construction of the car which you had seen prior to the time in October, 1889, that you testified to as being marked "Bear Creek Star Line, No. 11"?

A. Similar.

Q. 98. Now, you spoke of seeing another car of Whittier, Fuller & Company's in May last. I will just ask you what kind of a car that was?

A. It was a similar car, except that the tank was a cylinder tank.

Q. 99. I will show you this drawing, "Exhibit C," and ask you whether or not that is a correct representation of what that car was?

A. It is.

Q. 100. Do you remember what the capacity of that tank was?

A. No, sir.

Q. 101. The capacity wasn't marked on it then?

A. No, sir.

Q. 102. Would you call that a self-draining tank?

A. Yes, sir.

Q. 103. Why?

A. It was a cylinder, the outlet being at the bottom, 132 everything would run out. It was a cylinder running horizontally.

Q. 104. Then it would have to be a self-drainer, lying in that position?

A. Yes, sir.

Q. 105. Where would the filling opening be?

A. At the highest point opposite the outlet, and it makes it also a slanting top.

Q. 106. Was there any compartment in that car, or any space in that car, adapted to carry dry merchandise?

A. The ends of the car were compartments for dry merchandise.

Q. 107. Did you find anything between the ends of those dry compartments and the oil tank, and if so what was it, and is it shown on this drawing?

A. It was a block of wood about twelve inches high and eight inches wide bolted to the floor, separating the tank on the floor space of the car from the end compartments.

Q. 108. What was the object of that block?

A. To act as a division, so that freight, dry merchandise, could not be piled against the tank.

Q. 109. Could that block be readily removed?

A. In about five minutes.

Q. 110. How would you remove it?

A. With a monkey-wrench you could unscrew the nut and take it right out.

Q. 111. Now, I will ask you whether or not that car, constructed like this drawing, "Exhibit C," was adapted to accomplish the same purposes as the other car which you saw there?

133 A. Exactly.

(A recess was here taken until two o'clock this afternoon in conformity with agreement of counsel.)

TUESDAY, *December 16, 1890*—afternoon.

Present: Mr. Miller and Mr. Blanding, of counsel for complainant; Mr. Boone, of counsel for respondents.

Examination-in-chief of CHARLES A. WATSON. (Continued.)

By Mr. MILLER:

Q. 112. Mr. Watson, what did you say was the oil carrying capacity of those patent cars of the complainant?

A. It varies from four thousand to five thousand gallons.

Q. 113. About what is the value of a carload of this oil that is brought in one of the complainant's cars?

A. The average value is about eight hundred dollars.

Q. 114. And that is figured on a capacity of how much?

A. Say forty-five hundred gallons, taking an average. You take the minimum capacity and it is worth seven hundred and twenty dollars, and the maximum capacity and it is worth nine hundred dollars. The average value is about eight hundred dollars.

Q. 115. I will ask you if you know what kinds of devices were used for transporting by rail oils in bulk or otherwise, prior to the date of this patent, which is 1879?

A. It was transported in boiler cars and in barrels.

134 Q. 116. Do you refer to the boiler tanks which you testified to heretofore as being put on a flat car?

A. Yes, sir.

Cross-examination of CHARLES A. WATSON.

By Mr. BOONE:

X.-Q. 1. Mr. Watson, you say you have been connected with the oil business for about nineteen years, have you?

A. Yes, sir; with the exception of four years.

X.-Q. 2. During all that period of time you have been in the employ of The Standard Oil Company or some of its branches?

A. With The Standard Oil Company.

X.-Q. 3. What has been your particular relation to that company during that period of time?

A. May I understand what you mean by "relation?"

X.-Q. 4. Have you been a clerk or employee?

A. I have been an employee of The Standard Oil Company in former years as bookkeeper and confidential clerk at one of their distributing points East. During the seven years while here on the Pacific Coast I have had general supervision of all their equipment, plants, including tank cars and stations.

X.-Q. 5. How long has The Standard Oil Company been using combination cars in transporting oil in its business? By combination cars I mean what you have referred to as the patent cars.

135 A. The Standard Oil Company has owned these patent cars for five years.

X.-Q. 6. That is not my question. The question is, how long have they been using such cars?

A. Five years.

X.-Q. 8. When did they commence to use them?

A. In 1885. May I say that they were in use prior to our using them?

X.-Q. 9. Do you know that to be the fact?

A. Yes, sir.

X.-Q. 10. Did you see them in use?

A. Yes, sir.

X.-Q. 11. Where?

A. By The Continental Oil Transportation Company here on the Pacific Coast.

X.-Q. 12. Why did The Standard Oil Company, in 1885, commence to use these combination cars?

A. Because they bought them of The Continental Oil and Transportation Company.

X.-Q. 13. What car did they use prior to that for transporting their oil?

A. What little oil was transported in bulk prior to that by The Standard Oil Company they used the boiler car.

X.-Q. 14. Do you know whether or not The Standard Oil Company uses any of these combination cars for transporting oil between any other points than between the Eastern States and the Pacific Coast?

A. I do not.

X.-Q. 15. Don't you know as a matter of fact that they only use those cars on that line and for that purpose?

A. I don't know that, either.

X.-Q. 16. During your long experience in the oil business, you have seen most all of the cars that have been used for
136 transporting oil, haven't you?

A. Yes, sir.

X.-Q. 17. Seen quite a variety of cars for that purpose, haven't you?

A. For transporting bulk oil, the two in question, the boiler car and the patent car.

X.-Q. 18. You say the boiler car was simply a long boiler or cylinder made of metal mounted on a car frame. Is that so?

A. On a flat car.

X.-Q. 19. That cylinder was adapted for holding and transporting oil, wasn't it?

A. Or any other liquid; yes, sir.

X.-Q. 20. How was it filled?

A. I never was at a place where they filled those cars. I never saw one filled in my life. I have unloaded them, hundreds of them, but I never saw one of them filled.

X.-Q. 21. And you don't know how they are filled?

A. I do not, not by actual knowledge from seeing them filled.

X.-Q. 22. Do you know how they were discharged?

A. Yes, sir.

X.-Q. 23. How?

A. By attaching a hose to the outlet on the under side of the boiler, and attaching that hose to a pipe.

X.-Q. 24. It was discharged in the same way that these tanks in the patent car were discharged, wasn't it?

A. Yes, sir; similar devices.

X.-Q. 25. And wasn't it filled in the same way?

A. I don't know, sir.

137 X.-Q. 26. It must have been filled through an opening in its top, mustn't it?

A. I never saw it filled.

X.-Q. 27. Well, you are a man of ordinary judgment, and you can state whether that car or tank was filled through an opening in the top, or through its side, or where, can't you?

A. It is positive knowledge that you want of this thing, isn't it, Mr. Commissioner?

The EXAMINER: Yes, sir.

A. Then I have no right to guess at anything, have I?

The EXAMINER: You are only called upon to testify as to what you know.

A. I don't know.

By Mr. BOONE:

X.-Q. 28. Then you are willing to testify positively that you have seen these tank oil cylinders in use since how long?

A. Since 1871.

X.-Q. 29. And you have discharged them?

A. Yes, sir.

X.-Q. 30. Taken the oil out of them?

A. Yes, sir.

X.-Q. 31. And you can't tell how they were filled?

A. I never saw any filled.

X.-Q. 32. I ask you whether you can tell how they were filled. Was there any filling opening in them?

A. There is a manhole on the top of the tank.

X.-Q. 33. Connected with the highest portion of the tank, isn't it?

A. The tank's being a cylinder the manhole is exactly on the top.

X.-Q. 34. In the same relation to that cylinder that 138 the filling opening is into the tank in the patent car?

A. Not always.

X.-Q. 35. Was it sometimes?

A. Yes, sir.

X.-Q. 36. In that case, then, the filling of the oil into the tanks, and the transporting of the oil, and the discharging of the oil from the cylinder, would be in the same manner that is used in the patent car, would it not?

A. Transporting and discharging are the same. They come from the East and discharge from the outside. I don't know how they were filled.

X.-Q. 37. I said supposing they were filled through this opening that you have just referred to in the top of the cylinder. Supposing that that were the case, then wouldn't the filling, the transporting, and the discharging of the oil be the same as in the patent car?

A. If you suppose that it isn't necessary for me to say how they were filled.

The EXAMINER: Answer the question, Mr. Watson.

(X.-Q. 37 repeated.)

A. Yes, sir.

X.-Q. 38. You say the advantage that is obtained by employing the tank compartments and storage compartments in one car is a matter of great economy in transporting oil, do you?

A. Yes, sir.

X.-Q. 39. That is about the only advantage there is in making that combination, isn't it?

A. That is a very good advantage.

X.-Q. 40. That is not an answer to my question.

(X.-Q. 39 repeated.)

139 A. It is a question of economy. There is a saving.

X.-Q. 41. Well, that is the only advantage, isn't it?

A. No, sir; there is another advantage. The car can be used to carry merchandise back instead of going back empty.

X.-Q. 52. That is a matter of economy, isn't it?

A. Economy, may be, to the railroad, as well as the economy of the loaded car coming out.

X.-Q. 43. Now, if it should be shown in this case, Mr. Watson, that combination cars, that is, cars having tank compartments and freight compartments arranged in a single car, had been used before this invention described in the patent sued on, then there would be no particular advantage, would there, in this particular car over those prior cars?

A. I don't know, Mr. Boone.

X.-Q. 44. Well, you mean you don't know whether there would be or not?

A. The question there is such that I am not able to answer it.

Mr. BOONE: Please read the question to the witness again, Mr. Reporter, and see if he cannot answer it.

(X.-Q. 43 read.)

Mr. MILLER: We object to this question as incompetent, because the sufficient basis has not been laid for a hypothetical question of that kind, inasmuch as it does not state what the construction of the alleged prior cars is or was.

A. Well, I don't know. If that should be shown? I 140 don't know how to answer such a question.

X.-Q. 45. Well, the advantage of this car is that you can carry freight and oil in the same car, freight in one direction and oil in the other; isn't that the advantage that you get?

A. No, sir; that is no advantage that we get, The Standard Oil Company. We carry oil but in one direction.

X.-Q. 46. That is an advantage that the patent invention obtains, isn't it? it makes no difference whether you get the advantage or the railroad company gets it?

A. There is an advantage over the boiler car in this car that we can carry oil in one direction, and dry merchandise can be carried in the other.

X.-Q. 47. What other advantage has that car besides that one?

A. I am not able to state.

X.-Q. 48. Then you don't know of any other advantage, do you?

A. No; I know of no other.

X.-Q. 49. You say you never heard of any car adapted to carry freight in one direction and oil in the other prior to the date of this patent sued on?

A. No, sir; I never did.

X.-Q. 50. Do you know of any reason why oil cannot be carried in the middle compartment of complainant's car?

A. Only that there is no tank there to hold it.

X.-Q. 51. You could put a tank in there, couldn't you?

A. Not very well, sir.

X.-Q. 52. Why not?

A. It would overload the car.

X.-Q. 53. If the car was strong enough to sustain it and carry it, it could be done, couldn't it?

141 A. Not very well, with the two other tanks in the ends filled.

X.-Q. 54. That would be merely a question of strength of material, wouldn't it?

A. It would not be practical to get out.

X.-Q. 55. Why not?

A. With the center compartment of the car all filled with a tank how would you get at the end compartment?

X.-Q. 56. Suppose you put two or three tanks in the center compartment?

A. There is no room for that.

X.-Q. 57. If they were small enough there would be room enough, wouldn't there?

A. Yes, of course.

X.-Q. 58. Well, you know of no reason why oil could not be carried in the center compartment as well as in the end compartments, do you?

A. Yes, sir; I do. It is impractical.

X.-Q. 59. Why is it impractical?

A. I have already stated my reasons for that.

X.-Q. 60. Please state them again?

A. It would overload the car.

X.-Q. 61. Well, supposing the car was strong enough to sustain any amount of weight that was placed inside of it, then would you see anything impractical in carrying oil in the center compartment as well as in the end compartment?

A. (Long pause. No answer.)

X.-Q. 62. Why do you delay to answer?

A. I can't answer such questions as that, Mr. Boone. I don't know anything about that kind of a proposition.

142 X.-Q. 63. Well, if you can't answer it all you have to do is to say you can't.

A. I say it is impractical, and I have said so before, and I don't think you ought to ask such questions as that three or four times.

X.-Q. 64. Now, you say you have discharged the cars for the complainant in this case in a number of instances, have you?

A. Yes, sir.

X.-Q. 65. In fact, it has been your business to look after the discharging of the cars, hasn't it?

A. Partly.

X.-Q. 66. Now, please refer to the model "Exhibit D," and suppose that that is one of the complainant's cars instead of one of the defendant's, at what point in that car is the discharge apparatus or opening placed?

A. Near the center underneath each tank.

X.-Q. 67. Suppose this was complainant's car with two tanks, one in the compartment at each end, in what part of the bottom of the car is the discharge opening or apparatus placed, please indicate?

A. Underneath the car at the bottom of the tank at one side. The outlet of our tank is ahead of the wheels, of the trucks. These wheels cannot be set in the proportion they should be, but is absolutely right in front of the wheel, sometimes on one side of the car, and sometimes on the other.

X.-Q. 68. Please examine the drawing of the patent "Exhibit A," and point out at what part of the bottom of the car that discharge opening is placed?

A. The same as I have just described.

143 X.-Q. 69. In front?

A. Yes, sir; in front.

X.-Q. 70. Then you say according to the drawings of the patent "Exhibit A" the discharge opening is placed in front of the trucks?

A. Not absolutely in front of the trucks, possibly. One car may be twenty-nine feet long and another thirty. The relative distance may be six inches from the rim of the head wheel, and it may be a trifle behind six inches from the rim, but it is at the end part of the car at the side, and invariably ahead of the beam that holds the car.

X.-Q. 71. How does the bottom of the car incline or pitch?

A. Towards the center of the car. From the end towards the center.

X.-Q. 72. If a leak would spring in one of those cars during transportation what would become of the oil?

A. It would leak out.

X.-Q. 73. In what direction would it flow off?

A. Down.

X.-Q. 74. Towards the dry compartment, wouldn't it?

A. There are apertures in the floor, and it would simply flow out?

X.-Q. 75. If there were no apertures what would result?

A. The floors are never tight enough to hold it.

X.-Q. 76. But if the floor was tight enough to hold it, then what?

A. It would flow into the dry compartment.

X.-Q. 77. It would not direct it away from the dry compartment, would it?

A. No, sir.

X.-Q. 78. You say the bottom of the car is open enough to admit of any leak going out, so it would not affect the
144 dry compartment?

A. Practically, the bottom is not tight enough to keep it from flowing out.

X.-Q. 79. You say the cars' bottoms are not practically made tight enough to flow the oil into that compartment?

A. No, sir.

X.-Q. 80. So then, there is no need for any opening to allow of discharge, is there?

A. In case the floor should be perfectly tight, laid double, then the apertures for the leakage to go away are absolutely necessary, and they are always provided for that purpose.

X.-Q. 81. But you say the pitch of the floor is towards the dry compartment?

A. Yes, sir.

X.-Q. 82. And that is an advantage in the construction of that class of cars, isn't it?

A. I don't know.

X.-Q. 83. You don't?

A. No, sir.

X.-Q. 84. Is it a disadvantage?

A. I don't know that either.

X.-Q. 85. Wouldn't that tank bottom be fully as effective if it was perfectly flat?

A. No, sir; for the oil wouldn't run out of itself. It would not be self draining when unloading the car.

X.-Q. 86. Well, that would be owing to whether the car was standing on a level or not, wouldn't it? If the car was on a little incline wouldn't it be self-draining?

A. One end would, and the other end would not.

X.-Q. 87. But as far as the utility of the tank is concerned for holding and transporting oil, it would do that just
145 as well, wouldn't it, whether the bottom was flat or inclined?

A. Yes, sir; it would transport it just as well, but it would not unload as easily.

X.-Q. 88. Isn't it customary in discharging oil from any vessel to tip the vessel in order to drain the oil out?

A. Not in that patent tank car.

X.-Q. 89. I am not talking of the patent tank car. I am speaking now of an ordinary vessel.

A. Mr. Miller, ought he not to describe the vessel?

Mr. MILLER: Just answer the question in any way you like.

(X.-Q. 88 repeated.)

A. I don't understand that question, gentlemen. I never

saw a vessel—(long pause.) I never handled any package or vessel that I ever had to tip it to drain the oil out. A barrel or a tank car or anything that I ever saw oil transported in will drain itself—boiler car, patent car, or a barrel.

X.-Q. 90. Did you ever empty oil out of an oil-can?

A. Yes, sir; but I never tipped it.

X.-Q. 91. Did you ever drain oil out of an oil-can without tipping the can?

A. Yes, sir. When it is necessary to take the oil out of an oil-can we punch a hold in the bottom.

Mr. BOONE: I hereby notify counsel that I will hereafter put in evidence the patent which I now show to the witness.

146 Mr. MILLER: We object to counsel showing any patent to the witness without it being in evidence, and furthermore, it is not cross-examination.

By Mr. BOONE:

X.-Q. 92. Did you ever see an oil car constructed like the oil car described in United States Letters Patent No. 163,515, which was issued to O. P. Odell, May 18, 1875, and which I now show you?

A. No, sir.

X.-Q. 93. Did you ever see a petroleum car constructed like the car described and represented in United States Letters Patent No. 55,832, issued to J. A. Densmore and W. N. Vost, dated June 26, 1866?

A. No, sir.

X.-Q. 94. Did you ever see an oil car constructed like that represented in United States Letters Patent No. 55,831, issued to Densmore and Vost June 26, 1886, now shown you?

A. No, sir.

X.-Q. 95. Did you ever see an oil car constructed like the car illustrated and shown in Reissue Letters Patent No. 3,622, dated August 31, 1869, issued to J. F. Keeler for improvements in railroad cars for transporting petroleum, and which I now show you?

A. No, sir.

X.-Q. 96. Did you ever see a car constructed like the car represented in Reissue Letters Patent No. 4,788, issued to John Clark, March 5, 1872, and which I now show you?

A. No, sir.

X.-Q. 97. Did you ever see a car constructed like the car represented in United States Letters Patent No. 190,542, issued to H. G. Brooks May 8, 1877, for tank and freight car,
147 and which patent is now shown you?

A. No, sir.

X.-Q. 98. Then you have never paid any particular attention to the matter of oil cars, have you, other than such as have been brought directly to your attention in your business in connection with The Standard Oil Company?

A. That is all.

X.-Q. 99. Now, you say you saw some cars at Fourth and Townsend streets that were consigned to Whittier, Fuller & Company?

A. The contents of them were; yes, sir.

X.-Q. 100. How do you know that to be a fact?

A. From the billing in the Southern Pacific office, free to anybody to see.

X.-Q. 101. Did you see the billing?

A. Yes, sir.

X.-Q. 102. How came you to see the billing?

A. It is free for anybody to see it.

X.-Q. 103. How did you come to examine it?

A. We go down to look for the billing of our own cars, and it is free for anybody to see.

X.-Q. 104. You were anxious to see about those cars, were you not?

A. No, sir; we were looking for the billing of our own cars, and I saw the billing for the Whittier, Fuller car. They have an office for that purpose that we go to and make inquiry and look at our billing and get our car numbers, and put them where we want them. You see there is cars there loaded with chickens, eggs, or apples, the same as coal oil, and everybody has that privilege.

X.-Q. 105. If one company could monopolize the transportation of oil in these patent cars it would be a very valuable monopoly, wouldn't it, Mr. Watson?

A. No, sir; I don't think so.

X.-Q. 106. It would enable that company to obtain its oil cheaper, wouldn't it, than other persons who did not ship in combination cars?

A. It would enable the owner of those cars to save ninety-five dollars on every car they bring out, or they wouldn't have to pay for the return of the boiler car going back East.

X.-Q. 107. Now, that saving of ninety-five dollars on every carload of oil would be a material element, wouldn't it, in the trade in oil?

A. Well, it would be a saving of ninety-five dollars on every car, that is all.

X.-Q. 108. Then if the price of oil was reduced down to a very close figure it would give the person who owned that car, who shipped his oil in such car, a great advantage in the trade, wouldn't it?

A. No great advantage; no, sir. It would simply amount to the capacity of the car and the saving of the ninety-five dollars.

X.-Q. 109. It would enable the persons who shipped their oil that way to ship their oil for ninety-five dollars a car-load less than a person who had no such car, wouldn't it, and still not lose money?

A. Not exactly that.

X.-Q. 110. Well, is that the fact?

A. No.

X.-Q. 111. It is not?

149 A. No. It is not the absolute fact that he could do that. While he saves ninety-five dollars in the transportation of the car, he can't save that whole ninety-five dollars in distributing the oil.

X.-Q. 112. But it would enable him to sell that earload of oil for ninety-five dollars less than another person would have to pay to ship that oil out here?

A. If you put the question that it would cost another man ninety-five dollars to get the same oil out, I would say yes.

X.-Q. 113. What is the business of The Standard Oil Company?

A. The distributors of petroleum and its products.

X.-Q. 114. Dealers in oil exclusively, isn't it?

A. Dealers in petroleum and its products exclusively; yes, sir.

X.-Q. 115. Do you know the firm of Whittier, Fuller & Company?

A. Yes, sir.

X.-Q. 116. They are a large firm, are they not, and do a large business?

A. Yes, sir.

X.-Q. 117. Their business is confined to the Pacific Coast, though, isn't it?

A. I am not able to say, on that point.

X.-Q. 118. But they do a large business in oils on the Pacific Coast, don't they?

A. Yes, sir.

X.-Q. 119. And in that respect they come directly in competition with The Standard Oil Company, don't they?

A. Yes, sir.

150 X.-Q. 120. They purchase oils in the same market that The Standard Oil Company obtains its oils from, don't they?

A. I couldn't say, Mr. Boone. They bring their oils from the East.

X.-Q. 121. That is what I mean. It is all shipped across the plains in the cars?

A. Shipped across the continent. Not all of it, though. They get a great deal of it around Cape Horn in cans and cases.

Re-examination of CHARLES A. WATSON.

By Mr. MILLER:

R.-Q. 1. Just take the patent "Exhibit A," for one moment, Mr. Watson, and refer to it while I ask you a question in answer to something that was called out by cross-examination. You say it would be impractical, in your judgment, to carry oil in a tank in that center compartment at the same time you were carrying oil in the two end compartments?

A. Yes, sir.

R.-Q. 2. Just state briefly why it would be impractical to do that?

A. Mr. Miller, that question was not put exactly in that way.

R.-Q. 4. Well, I put it that way now.

A. In ordinary cars, such as are in use, and such as can be transported across the continent, to load oil in the center of a car where it has no bearing on the trucks or the beams that support the car on the trucks, would not only destroy
151 the car, but it would run a great danger of destroying other cars, as it would weaken the center of the cars, and so forth, so that in sweeping around a curve it would double it up like a jack-knife. The car would be a decided nuisance.

R.-Q. 5. Suppose that center compartment was filled with a large oil tank, would there be any way of getting into the end compartments from the center compartment then?

A. No, sir; you couldn't get at the others except through the roof, which is impracticable to do.

R.-Q. 6. Suppose you were to fill the end compartments with oil, and also the center compartment with oil after putting a large tank in there, would that be more than the proper load for a freight car?

A. Oh, yes; it would be more than double.

R.-Q. 7. Now, referring to the patent "Exhibit A," I will ask you whether or not it is any advantage to have the bottom self-draining and on an incline, instead of being square and flat?

A. Yes, sir. The advantage is that it unloads itself. By its own heft of the oil it all runs out clean without any trouble.

R.-Q. 8. I will ask you if it is any advantage in having the top on an incline instead of having it flat?

A. With the filling hole at the highest point the tank can be absolutely filled with oil, so there can be no motion, no sloshing, in transportation.

R.-Q. 9. I will ask you whether or not it is any advantage in having that movable partition there to get at the tanks?

152 A. Yes, sir. When they leak you can readily get at it and fix it.

R.-Q. 10. I will ask you whether in the car you saw belonging to Whittier, Fuller & Company, and of which we have this tin model here, you could take out a partition and get at it when it leaked?

A. Yes, sir; easily, practically.

R.-Q. 11. How could you do it?

A. These tanks in these cars seldom leak anywhere except in the bottom, which actually carries the most weight and is subject to the most wear. It is easy enough to get at the bottom of their tank and fix it.

R.-Q. 12. State how?

A. Hoist it up, and lay right on your back underneath and calk it. There is room enough between this car top and the tank in the car that I saw, in the "Bear Creek Star Line," car No. 13, to do it; and then in addition to that it can be moved should anything happen to the side of the car. That tank can be simply raised an inch or so and put on an inch roller and rolled to the place where it leaks and fix it and roll it back again just like nothing had happened.

R.-Q. 13. And put up the partition and go right on?

A. Yes, sir; the same as before. Virtually the same thing can be accomplished by that machine as can be accomplished by the patent "Exhibit A."

153 (Complaint introduces in evidence assignment from M. Campbell Brown, patentee, of United States letters patent "Exhibit A" herein, to The Continental Oil and Transportation Company of Council Bluffs, Iowa, of all of the right, title and interest of said Brown in the letters patent sued on, dated May 10, 1880, and acknowledged before a Notary Public in and for Pottowattamie County, Ohio, May 10, 1880, and to which is appended the following: (Stamp.) "U. S. Patent Office. Received for record May 14, 1880. Recorded Liber K 45, pages "262.")

Marked "Complainant's Exhibit E.")

Mr. BOONE: I will object to that assignment on the ground that there is no evidence that it has been ever properly recorded in the Patent Office. There is no seal of the Patent Office attached, and no seal of the Commissioner of Patents, or any other indication that the document has ever been properly recorded.

(Complainant also introduces in evidence assignment from The Continental Oil and Transportation Company of Califor-

nia to the The Standard Oil Company, a corporation organized and existing under and by virtue of the laws of the State of Iowa, of all right, title and interest of said Continental Oil and Transportation Company of California, in and to the letters patent sued on herein, dated the 1st day of July, 1885, acknowledged before a Notary Public in and for the City and County of San Francisco, State of California, on the 23d day of July, 1885, and appended to said assignment the

154 certificate of the recording of the same in the office of the United States Commissioner of Patents, in Liber R 40, page 61, of Transfers of Patents.

Marked "Complainant's Exhibit F.")

(Examination continued, in conformity with agreement of counsel, until Tuesday, December 30, 1890, at half past ten o'clock, A. M.)

155

SATURDAY, *January 10, 1891.*

Present: Mr. Denson, of counsel for respondents.

(Examination further continued, in conformity with request of Mr. Miller, to a day to be agreed upon.)

TUESDAY, *January 13, 1891.*

Present: Mr. Miller and Mr. Blanding of counsel for complainant; Mr. Denson, of counsel for respondents.

(Examination further continued, in conformity with agreement of counsel, until to-morrow, Wednesday, January 14, 1891, at ten o'clock.)

WEDNESDAY, *January 14, 1891.*

Present: Mr. Miller, of counsel for complainant; Mr. Boone, of counsel for respondent.

(Complainant introduces in evidence copy of assignment from the Continental Oil and Transportation Company, a corporation under the laws of Iowa, to the Continental Oil and Transportation Company of California, a corporation under the laws of California, dated May 10, 1884, assigning all the right, title and interest of the said Continental Oil and Transportation Company to said Continental Oil and Transportation of California, under, in and to United States Letters Patent sued on in this case. Marked "Complainant's Exhibit G.")

156

(It is admitted as a fact by both complainant and respondents, that an assignment of which "Exhibit G" is a copy was executed by the Continental Oil and Transportation Company by Isaac E. Blake its President, and George F. Wright its Secretary, under the corporate seal of said corporation, on the 10th day of May, 1884.)

(Complainant introduces in evidence, copy, certified by the Secretary and under the seal of the Continental Oil and Trans-

portation Company, of a resolution passed at a meeting of the Directors of the Continental Oil and Transportation Company of Council Bluffs, Iowa, on the 10th day of May, 1884, authorizing the execution of the assignment "Exhibit G," above referred to. Marked "Complainant's Exhibit H.")

(Complainant introduces in evidence the record-book of the Continental Oil and Transportation Company of California, upon pages 44, 50, 51 and 52 of which appears the following: "A regular meeting of the Board of Directors of the Continental Oil and Transportation Company of California was held at the office of the Company, 123 California Street, on Tuesday, May 13, A. D. 1884, at which were present Lloyd Tevis, Harry L. Tevis and George Loomis. The Vice-President in the chair. * * * * *

"On motion of Harry L. Tevis, seconded by Lloyd Tevis, it was unanimously resolved that this corporation purchase, accept and receive of and from the Continental Oil and Transportation Company, a corporation organized and existing under and by virtue of the laws of the State of Iowa, 157 "grants and assignment of the following, to wit, * * * "all the right, title and interest which said last named corporation ever has had or now has in, to or under certain Letters Patent of the United States of America, No. 216,506, issued to M. Campbell Brown on the 17th day of June, 1879, for a certain improvement in oil cars for the purpose of transporting oils or fluids, and also the exclusive right and privilege to make, construct, run, employ, have and use all and singular the kinds of cars mentioned in said letters patent, at, to, from and between all points and places in the United States and Territories thereof, and to transport any oils or fluids in cars of the style, capacity and workmanship of those at one time furnished by Wells, French & Company of Chicago, Illinois, to said last named corporation and embracing all and singular all the improvements covered by the above described letters patent. * * * * *

"And the President or any of the officers of this corporation are hereby authorized and directed to receive and accept said grants and assignment for and on behalf of this corporation, and as its corporate act and deed."

(It is agreed by and between counsel for the respective parties herein, that said record book shall be withdrawn from evidence, and that the extract therefrom above quoted shall be received as evidence herein without objection.)

(It is admitted as a fact, by both complainant and respondents, that the Continental Oil and Transportation Company is and at all times since January, 1876, has been a corporation or-

158 organized and existing under and by virtue of the laws of the State of Iowa.)

(It is in like manner admitted as a fact that the Continental Oil and Transportation of California is, and for the ten years last past has been, a corporation organized and existing under and by virtue of the laws of the State of California.)

(It is in like manner admitted as a fact, that the complainant herein is, and for the ten years last past has been, a corporation organized and existing under and by virtue of the laws of the State of Iowa.)

Mr. BOONE: The introduction in evidence of the assignment "Exhibit G," and the assignment itself, is objected to, on the ground that it is immaterial, irrelevant and incompetent for any purposes in this suit, it appearing by the records of the Continental Oil and Transportation Company of California in evidence, that the purchase of the right purporting to be conveyed by said assignment was not authorized until the 13th day of May, 1884, whereas the document purporting to be an assignment conveying said right is dated May 10, 1884.

Examination-in-chief of FREDERICK M. WOODS on behalf of respondents.

By Mr. BOONE:

Q. 1. State your name, age, place of residence and occupation.

159 A. My name is Frederick M. Woods, my age forty-eight years; I reside in San Francisco, and am engaged in the wholesale paint and oil business: connected with Whittier, Fuller & Company, respondent.

Q. 2. How long have you been connected with Whittier, Fuller & Company, Mr. Woods?

A. Seven years and a half.

Q. 3. What is the nature and character of their business?

A. Wholesale and retail dealers in paints, oils, glass, and other articles that generally go with the business.

Q. 4. Where is their place of business?

A. The head office is at 21 Front street, in this city.

Q. 5. What is the extent and character of their business, as far as its extent is concerned?

A. Well, they have branches in different parts of the State, and also in Oregon. They have a store at San Diego, one at Los Angeles, one at Oakland, one at Stockton, one at Sacramento, and one at Portland, Oregon.

Q. 6. Can you state about the extent of that company's business; that is, the yearly sales of its business?

Mr. MILLER: We object to the question as irrelevant and im-

material. We have no controversy with regard to the amount of the defendant's business.

A. I don't know the exact figures.

Q. 7. Well, they do a large business, do they not?

A. Yes, sir.

Q. 8. Where does the defendant, Whittier, Fuller & 160 Company, purchase its oils?

A. Mostly in the East.

Q. 9. How does it transport its oils from the Eastern States to the Pacific Coast?

A. In sailing ships from New York, and by rail?

Q. 10. What other firm, company or corporation is there doing business on this coast that you know of that ships oil across the continent by rail?

Mr. MILLER: We object to that question, as irrelevant and immaterial, on the ground that we are not suing anybody else but Whittier, Fuller & Company and the Southern Pacific Company, and it is therefore immaterial as to what other persons ship oil, or how they ship it.

A. The Standard Oil Company.

Q. 11. Anybody else?

(The same objection by complainant.)

A. I think there are other parties that ship oil here of various kinds than the Standard Oil Company and Whittier, Fuller & Company.

Q. 12. Are there any other parties that you know of, besides the Standard Oil Company and Whittier, Fuller & Company, that ship oil in cars in bulk?

(The same objections by complainant.)

A. I don't know of any others.

Q. 13. You would be likely to know if such were the case, would you not, being in the business?

A. Yes, sir.

Q. 14. What character of car has the defendant Whittier, Fuller & Co. employed in shipping oil from the Eastern 161 States to the Pacific Coast?

A. They have employed what is known as the cylinder car, for one kind, and also a car that we own and control ourselves, built by us, through our instruction.

Q. 15. I present you a model here, Mr. Woods. Please examine that model, and state of what it is a model?

A. I should say it was a model of the car which is used by Whittier, Fuller & Company, and which was built by their instructions. I don't know who made this model.

(The model last above referred to is here introduced in evidence by respondents, and marked "Respondents' Exhibit 1.")

Q. 16. Have you seen and examined those cars that were

built and used by Whittier, Fuller & Company—by your firm, Mr. Woods?

A. Yes, sir.

Q. 17. Do you understand how they were made and constructed?

A. Yes, sir; perfectly.

Q. 18. Now, please examine the model "Exhibit 1," and state whether or not it correctly represents the cars built and used by your firm as testified to?

A. Yes, sir; that is a correct model?

Q. 19. Do you know who built that model?

A. No, sir; I don't know who built that model.

Q. 20. The tank in the cars represented by that model "Exhibit 1," in which the oil is contained, is supported and contained within a compartment, is it not, as represented in that model in the middle of the car?

A. Yes, sir.

162 Q. 21. What means are employed in those cars for keeping that tank in place in the middle of the car?

A. It is braced with timbers. As I remember it, the tank itself sets on some timbers, those timbers being fastened to the bottom of the car, and being also braced by other timbers fastened to the car.

Q. 22. State whether or not the cars represented by that model "Exhibit 1," have any removable partition separating the middle compartment in which the oil tank is contained from the end compartments?

A. It has no movable partitions, as I remember it. It has a partition of boards which can be seen from the end compartment, but those are nailed to some upright pieces.

Q. 23. What means would have to be resorted to to remove that tank from that compartment?

A. Take out the side of the car, or tear out the partition from either end of the car.

(Respondent introduces in evidence Patent Office copies of specifications and drawings of the following United States Letters Patent:)

No. 190,542, granted May 8, 1877, to H. G. Brooks, for tank and freight car. Marked "Respondents' Exhibit 2."

No. 163,515, granted May 18, 1875, to Albert P. Odell, for improvement in oil cars. Marked "Respondents' Exhibit 3."

No. 55,832, granted June 26, 1866, to J. and A. Densmore and G. W. N. Yost, for petroleum car. Marked "Respondents' Exhibit 4."

163 No. 55,831, granted June 26, 1866, to J. Densmore and G. W. N. Yost, for freight car. Marked "Respondents' Exhibit 5."

Reissue No. 3,622, granted August 31, 1869, to J. F. Keeler, for oil and paint vessels. Marked "Respondents' Exhibit 6."

Reissue No. 4,788, granted March 5, 1875, to John Clark, for improvement in cars for carrying petroleum. Marked, "Respondents' Exhibit 7."

The original letters patent, of which the "Exhibit 7" is a reissue, being No. 40,458, granted November 3, 1863, to John Clark, for improvement in cars for carrying petroleum. Marked "Respondents' Exhibit 8."

(Examination continued, in conformity with agreement of counsel, until to-morrow morning, Thursday, January 15, 1891, at half past ten o'clock.)

THURSDAY, *January 15, 1891.*

Present: Mr. Miller and Mr. Blanding, of counsel for complainant; Mr. Boone and Mr. Denson, of counsel for respondents.

Examination-in-chief of GEORGE W. UEFFINGER, on behalf of respondents.

By Mr. BOONE:

Q. 1. I believe you testified, Mr. Ueffinger, that you examined the cars of the defendant at Fourth and Townsend streets some time last year?

A. Yes, sir.

164 Q. 2. I believe you testified that the tank compartment of defendants' car having a square tank, had a partition separating each end of the tank compartment from the end compartment, did you not?

A. Yes, sir.

Q. 3. Those partitions, I believe you stated, were composed of boards placed horizontally across the car and nailed to uprights. Is that correct?

A. Yes, sir.

Q. 4. How many uprights did you find in each car, and in each partition?

A. Do you refer to the uprights merely in the partition?

Q. 5. All the uprights to which the partition boards were nailed?

A. There were four in each partition; that makes eight.

Q. 6. How were the end uprights of the partition connected with the car body or frame?

A. To the best of my knowledge they were a part of the frame of the car.

Q. 7. When you say a part of the frame of the car, what do you mean—the permanent part or temporary loose part?

A. Well, a permanent part.

Q. 8. Then you found that each one of the boards of the partition was nailed to each one of these end uprights, did you?

A. Yes, sir.

Q. In the model "Exhibit D," I find the end uprights represented as being loose. Is that the construction you found in the defendants' car?

A. No, sir.

Q. 10. Then, if I understand you, in the actual car the end upright was a permanent part of the car body?

165 A. Of the framing—yes, sir; of the car itself.

Q. 11. In that respect, then, the model does not represent the actual car, does it?

Mr. MILLER: I object to that question, as calling for a conclusion of law. The model and the testimony speak for themselves. Counsel has asked for the facts, and has gotten the facts, and he is now asking the witness to put a construction upon the facts.

A. It does not.

Q. 12. Then, that being the case, in order to remove the end partition at either end of that compartment, the nails would have to be withdrawn or cut off, would they not, which connect each board of the partition with those end uprights?

(Question objected to by complainant as leading, and withdrawn.)

Q. 13. State what would have to be done to remove or take down the end partitions of that car?

A. The nails in the end uprights in the partition would evidently have to be withdrawn before the partition could be removed.

Q. 14. What would be the object of removing the partition in the defendants' car?

Mr. MILLER: We object to that question as irrelevant, incompetent and immaterial. It is not shown that this witness is an expert in the use of freight or oil cars.

166 A. It seems clear to me that the partition serves to separate the oil tank from other merchandise that would be placed in those end compartments.

Q. 15. As far as removing the tank from the tank-compartment is concerned, what object or effect could the partition have at either end of that compartment?

(The same objections by complainant.)

A. None whatever.

Q. 16. If either of those partitions was removed or taken down, would it be possible to take the tank out of the car or remove it from its place in the car?

A. No, sir.

Q. 17. What would be necessary in order to remove that tank or displace it from the position which it occupies in the tank-compartment?

A. Well, a portion of the car would have to be dismembered in order to make a space large enough to remove it.

Q. 18. Please give your reasons for that answer.

A. The only loose portion of the car is those partitions, and the doors would not admit of sufficient space to remove the tank, and the rest of the car is rigidly bound together.

Q. 19. You noticed, did you, that the dome portion of the tank extended up through the top of the car?

A. Yes, sir; above the top of the car.

Q. 20. Now, would it be possible to move the tank from its position without tearing away the top of the car or portion of the bottom to allow the tank to be dropped sufficiently to allow the dome to clear the car?

A. Either the top or bottom would have to be removed in that case.

Q. 21. By removing, you mean torn away, do you not?

A. Yes, sir; torn away.

Cross-examination of GEORGE W. UEFFINGER.

By MILLER:

X.-Q. 1. Mr. Ueffinger, you observe that in this model which you have been examined about, marked "Exhibit D," the longitudinal sills of the car, and in fact all of the car except the partitions and the upright frames to which the cross-pieces of the partition are formed, are made of tin, are they not?

A. In the model; yes, sir.

X.-Q. 2. The partitions you observe are made of wood, are they not?

A. Yes, sir.

X.-Q. 3. And the end uprights which you referred to in your testimony as being an integral part of the car are made of wood, are they not?

A. Yes, sir.

X.-Q. 4. In making the model then in that way, with the longitudinal sills of the car made of tin and the upright end pieces made of wood, it would be impossible to make the two pieces in one, would it not?

A. As shown in the model; yes, sir.

X.-Q. 5. Now, in the car which you saw at Fourth and Townsend streets belonging to these defendants, 168 what was that car made of, what material?

A. It was made of wood and iron.

X.-Q. 6. What material were the longitudinal sills made of on which the bottom of the car rests?

A. Wood.

X.-Q. 7. And of what material were the partions made?

A. Wood.

X.-Q. 8. And of what material were the upright end pieces of the partitions made to which the cross-pieces were fastened?

A. The same material.

X.-Q. 9. How were those upright end pieces connected with the longitudinal sills of the car?

A. From my knowledge they were fastened to them.

X.-Q. 10. They were an integral portion of the car, were they not?

A. Yes, sir.

X.-Q. 11. The drawing which you made, and which has been introduced in evidence here, shows fully the construction in that respect, does it not?

A. Yes, sir.

X.-Q. 12. So that if you were to remove the partition in that car then, you would still have those upright end pieces in the car, wouldn't you?

A. Yes, sir.

X.-Q. 13. The two intermediate upright pieces to which the cross-pieces of the partition are formed were not an integral part of the car, were they?

A. No, sir.

X.-Q. 14. So that if you were to remove the partition, or the boards which form the partition, you could have removed the two interior uprights and have left the two exterior ones standing, could you?

A. Yes, sir.

169 X.-Q. 15. Then, so far as the two end uprights were concerned, after you had removed the partition—referring to that solely—there would be no difficulty in taking out of the tank compartment anything that was in there and putting it into the end compartment, would there?

A. No, sir.

X.-Q. 16. In other words, the two end uprights would not form any obstruction in that regard, would they?

A. No, sir.

X.-Q. 17. I understood you to testify in your examination-in-chief that by removing the nails which fastened the cross-broads of the partition to the two end upright pieces that then you could take the whole partition out?

A. Yes, sir.

X.-Q. 18. In fact, one or perhaps two of the boards of that

cross partition were actually removed by a hammer when you were there?

A. Yes, sir.

X.-Q. 19. Now, you stated that on account of the length of that tank, and on account of the narrow width of the doors of the car it would be impossible after the partition was removed to take the tank into the merchandise compartment and then remove it through the doors, I understand you to say?

A. Yes, sir.

X.-Q. 20. Suppose, however, you were to remove the partitions in that car would there be any difficulty in removing the tank partially or a short distance, as by raising it for instance, so as to get underneath it so as to examine or repair the bottom of it?

A. No, sir; there would be no difficulty.

X.-Q. 21. That could be easily done, couldn't it?

A. Yes, sir.

170 X.-Q. 22. So that while the tank could not be actually taken out on account of its large size, it could be shifted about for the purpose of examining and repairing it, could it?

A. Yes, sir.

X.-Q. 23. I will show you another model which has been introduced in evidence in this case and marked "Exhibit 1," and I will ask you whether or not you find any removable partitions in that model?

A. No, sir; I do not.

X.-Q. 24. In that model the partitions are made immovable, are they not?

A. Yes, sir.

X.-Q. 25. In that respect, how does that model resemble the model "Exhibit D?"

A. Well, it is about the same.

X.-Q. 26. How, with regard to the partitions being removable or immovable?

A. Well, they would not be removable in the case of the model "Exhibit 1," but in the model "Exhibit D" they would be removable.

X.-Q. 27. Then, if I understand you, those two models differ in the fact that one has a removable partition and the other has not a removable partition?

A. Yes, sir.

X.-Q. 28. I will ask you how does this model "Exhibit 1" compare with the car which you saw at Fourth and Townsend streets, belonging to the defendants, in regard to the removability of the partitions?

A. It is not the same.

X.-Q. 29. In what respect is it not the same, just in general terms, I don't want to go into details, confining yourself
171 to the partition?

A. In the car which I saw the partition was removable, and in this model it is not removable.

Re-examination of GEORGE W. UEFFINGER.

By Mr. BOONE:

R.-Q. 1. There is a partition represented in the model "Exhibit 1," is there not, Mr. Ueffinger?

A. Yes, sir.

R.-Q. 2. It is made of tin, though, is it not?

A. Yes, sir.

R.-Q. 3. Then the only difference between the two models is that in "Exhibit 1" the partition is made of tin, while in "Exhibit D" it is made of wood, isn't it?

(Question objected to by complainant as leading.)

A. Yes, sir.

R.-Q. 4. You stated in your cross-examination that the two intermediate posts of the partition were not an integral part of the car. How is it when they form a part of the partition, and the partition is all in place, nailed up in the car, as to whether or not they then form an integral part of the car?

A. Simply as applies to the partition they form a part of the car.

R.-Q. 5. How are the outside boards of the car fastened to the car body—the side boards?

A. They are fastened to the longitudinal timbers of
172 the car by nails and bolts.

R.-Q. 6. Then you find that the partition was fastened to the car in the same manner that the outside boards of the car were fastened to the car, don't you?

A. Yes, sir.

R.-Q. 7. And in that sense would you say that the side boards or side of the car was an integral part of the car?

A. Yes, sir.

R.-Q. 8. In the same sense would you or not say that the intermediate posts of the partition, when the partition was in place, were an integral part of the car?

A. Yes, sir.

R.-Q. 9. Mr. Miller also asked you whether or not if one of the partitions was taken out of the defendant's car you could not move the tank a limited distance and raise it and get under it to examine and repair it?

A. Yes, sir.

R.-Q. 10. And you answered that that could be done.

A. Yes, sir.

R.-Q. 11. Now, I will ask you if the same could not be done, to the same extent almost, without removing one of the partitions?

A. You would have to remove another part of the car then.

R.-Q. 12. Couldn't you lift the tank up just as well, and just as high, without removing one of the partitions as you can by removing one of the partitions?

A. If you had another access to the tank you could.

R.-Q. 13. I didn't ask you anything about an access to the tank. I ask you if you could'nt raise the tank itself just as much and shift it just about as much without removing
173 one of the partitions as you could by removing one of the partitions?

A. To my knowledge I don't see any way of doing it.

R.-Q. 14. What have the end partitions got to do with the raising of the tank?

A. They are the loose connections affording access to the outside of the tank.

R.-Q. 15. But the end partitions don't prevent the tank from being lifted up inside of its compartment, do they?

A. No, sir.

R.-Q. 16. Then so far as the lifting of the tank and getting under it is concerned, that could be done just as well without taking the partition out as it could be done if the partition was taken out, couldn't it?

A. Yes, sir.

R.-Q. 17. If either end partition was taken out, would not the dome which extends through the top of the car prevent the tank from being shifted endwise to any extent?

A. It may be shifted somewhat.

R.-Q. 18. Well, what would limit the movement of the tank?

A. According to whatever clearance you would allow for the distance between the dome and the car proper.

R.-Q. 19. What is that limit of distance in the actual car, do you know?

A. It may be two or three feet, more or less. I don't know.

R.-Q. 20. Well, do you know anything about that?

A. I couldn't tell exactly.

R.-Q. 21. How much larger in diameter is the opening in the top of the car through which the dome passes
174 than the dome itself?

A. It may be six or twelve inches; six inches, may be.

R.-Q. 22. Six inches larger in diameter?

A. Yes, sir.

R.-Q. 23. Wouldn't that then limit the movement of the

tank to that distance, even if the end of the tank compartment was taken out?

A. Yes, sir.

By Mr. MILLER:

R.-Q. 24. Mr. Boone has asked you if it was not a fact that the only difference between this model, "Exhibit 1," and the model, "Exhibit D," so far as the partitions are concerned, is that in "Exhibit I" the partition is made of tin, and in "Exhibit D" the partition is made of wood, and you said, yes. Do you not find that there is another difference—that in "Exhibit I" the partition is immovable, and in "Exhibit D" the partition is removable?

A. Yes, sir.

R.-Q. 25. Then that is also a difference between the two models, is it not?

A. Yes, sir.

R.-Q. 26. Suppose you wanted to get at the bottom of the tank in "Exhibit D," or in the car which you saw at Fourth and Townsend streets, for the purpose of examining the bottom to see what its condition was, what would be the most natural way to get at the bottom of it?

A. To remove the loosest connection affording access to it, and raising the tank if necessary.

R.-Q. 27. By the "loosest connection" you mean the removable partitions?

A. Yes, sir.

R.-Q. 28. If you did not remove the partitions, or the side of the car, or the top or bottom of the car, it would
175 keep the tank enclosed in them, wouldn't it, so that it would be impossible to raise it?

A. You could raise it through the dome by any means above.

R.-Q. 29. What kind of means do you refer to?

A. By any kind of hoisting arrangement.

R.-Q. 30. But in that case you couldn't get at the bottom of the tank to examine it, could you?

A. No, sir.

R.-Q. 31. Nor could you get at the sides or the top of it to examine them, could you?

A. No.

By Mr. BOONE:

R.-Q. 32. You testified that the sides of the car were nailed to the car frame, didn't you?

A. Yes, sir.

R.-Q. 33. And that the end partitions were also nailed practically to the car frame, didn't you?

A. Yes, sir.

R.-Q. 34. Now, you could take out the side of the car about as easy as you could the compartment, couldn't you?

(Question objected to as leading, and withdrawn.)

R.-Q. 35. What would prevent the removal of a portion of the side of the car if you desired to get under the tank?

A. Nothing whatever.

R.-Q. 36. Would or would not the same means which you employ for removing a portion of the end compartment of the tank serve to remove a portion of the side of the car to accomplish the same purpose?

A. Yes, sir.

R.-Q. 37. Now you stated, in answer to questions of 176 Mr. Miller's, that the difference between the model "Exhibit 1," and the model "Exhibit D," was that in "Exhibit 1" the end compartment is immovable, while in "Exhibit D" it is removable?

A. Yes, sir.

R.-Q. 38. Supposing the end of the compartment was made of tin, as represented in "Exhibit 1," what would prevent the removing of that end by means of a hammer and cold chisel?

A. Nothing whatever.

R.-Q. 39. Then, in that sense, what is the difference in the removability of the two ends represented in those two models?

A. As a matter of speedily doing the process.

R.-Q. 40. That is, you could do it a little quicker in one case than you could in the other?

A. Yes, sir.

R.-Q. 41. Would you or would you not require force in both cases?

A. Yes, sir.

R.-Q. 42. Do you know whether it would be practicable to remove the partitions in defendants' car without mutilating the partition boards to a large extent?

A. They would be mutilated to a large extent.

By Mr. MILLER:

R.-Q. 43. There is nothing to prevent a person owning a freight car from breaking and knocking it to pieces entirely if he wanted to, is there?

A. No, sir.

R.-Q. 44. He could take an ordinary hammer and cold chisel and do it, couldn't he?

A. Yes, sir.

R.-Q. 45. You saw two of the boards removed, didn't you,

from this removable partition of the defendants' car at Fourth and Townsend streets?

A. Yes, sir.

177 R.-Q. 46. They were not mutilated, were they?

A. To a slight extent they were.

R.-Q. 47. To what extent?

A. The nails were, to the extent of getting them out, and the use of the chisel in prying off one of the boards.

R.-Q. 48. Do you remember what was the size of the nails that were used and that were withdrawn?

A. They were common nails, about two inches long.

R.-Q. 49. Eight-penny nails?

A. I couldn't exactly tell. They were ordinary light nails.

R.-Q. 50. Those two boards were placed back in the car in position, were they not?

A. Yes, sir.

R.-Q. 51. Did you see any particular difference in appearance after the boards were put back into the partition from what the partition showed before they were taken out?

A. Not those, no.

(It is stipulated and agreed, by and between counsel for the respective parties herein, that the reading of the above deposition to the witness, and the signing of the same by him, respectively, are waived.)

Examination-in-chief of FREDERICK W. WOODS, continued.

By Mr. BOONE:

Q. 24. State whether or not the tank could be removed from the compartment if one of the ends of the compartment
178 was removed?

A. No, sir; it could not.

Q. 25. What would prevent it?

A. The top of the car.

Q. 26. Please explain why?

Mr. MILLER: I object to this question, and to any more in this line, on the ground that the witness has not been shown to be an expert in the matter, and knows no more about it than any other intelligent man.

(It is agreed that the above objection shall be considered as having been interposed to each question asked this witness on examination-in-chief relating to the same subject matter of the last question.)

A. Because one portion of the tank comes above the top of the car.

Q. 27. Who designed the cars for transporting oil that are owned by the defendant, if you know?

A. Mr. Whittier and myself. I don't want to be understood as saying that we followed out all the details of making those cars, because we did not, but we designed the main portions as connected with that tank and with the body of the car itself. Of course we are not car-builders and we didn't enter into details. That was left to the builders.

Q. 28. What steps did you or Mr. Whittier take before or after designing the car used by the defendant to find out whether or not it was an infringement upon any patent?

Mr. MILLER: We object to the question as irrelevant, incompetent and immaterial, and not in answer to any of the issues in this case, because it is immaterial whether he took any steps or not, or whether he either did or did not know there
179 was a patent, or whether or not it was void.

A. As I remember, Mr. Whittier consulted Mr. Boone in regard to the matter.

By Mr. MILLER:

Q. 29. Were you present when Mr. Whittier consulted Mr. Boone?

A. I was present on several occasions. We also consulted Judge Denson in regard to the matter. After those consultations we communicated with car builders in the East and proceeded to have the cars built.

By Mr. BOONE:

Q. 30. Do you know Thomas W. Bakewell of Pittsburg, Pennsylvania?

A. No, sir.

Cross-examination of FREDERICK M. WOODS.

By Mr. MILLER:

X.-Q. 1. Mr. Woods, you have testified considerable here about the construction of these oil cars. I will ask you whether or not you are a mechanic?

A. No, sir; I don't claim to be a mechanic.

X.-Q. 2. How long have you been connected with the firm of Whittier, Fuller and Company?

A. Seven years and a half.

X.-Q. 3. What business were you engaged in prior to that time?

A. I was engaged in the poultry business.

X.-Q. 4. In this city?

A. Yes, sir.

X.-Q. 5. That was when you were in the California Market?

A. Yes, sir.

180 X.-Q. 6. You left that business to become connected with Whittier, Fuller and Company?

A. Yes, sir.

X.-Q. 7. Up to the time that you became connected with Whittier, Fuller and Company had you ever had occasion to examine any oil cars?

A. No, sir.

X.-Q. 8. Then up to that time you knew practically nothing about them, having had no occasion to examine them; is that a fact?

A. That is a fact.

X.-Q. 9. After you became connected with the firm of Whittier, Fuller and Company, what portion of the business was assigned to you?

A. Well, looking after the manufacturing interests of the firm, what was generally considered to be outside business.

X.-Q. 10. What do you mean by "outside business?"

A. Well, looking after all the manufacturing interests, warehouses, hiring and discharging the men, and also consulting with the firm in regard to anything of importance connected with it. I gave a portion of my time to the outside business, probably two or three hours a day, and the rest of the time in the office.

X.-Q. 11. When did you first have anything to do with these oil cars?

A. I think about the time these were built—just before they were built.

X.-Q. 12. When were they built?

A. They were built, four of them, originally by Polloc and Company.

X.-Q. 13. Where was their place of business?

181 A. Some place in Pennsylvania, I don't know exactly.

X.-Q. 14. And they built four for you?

A. Yes, sir.

X.-Q. 15. Did you have any built by any other persons?

A. Yes, sir; I had one built by the St. Charles Manufacturing Company.

X.-Q. 16. Where is their place of business?

A. Some place in Missouri, I think.

X.-Q. 17. Did you have any other built?

A. No, sir; not at that time.

X.-Q. 18. Did you have any built at any other time?

A. I think we have had some built since.

X.-Q. 19. How many have you had built since then?

A. I think six; either built or in process of building.

X.-Q. 20. When were those last six built?

A. I should say within the last three or four months.

X.-Q. 21. So that makes eleven, in all, that you have had?

A. I think so.

X.-Q. 22. Before you commenced to use these patent cars, what kind of cars had Whittier, Fuller & Company been using?

A. Cylinder cars. What I call cylinder cars.

X.-Q. 23. Just explain what you mean by "cylinder cars?"

A. I mean a tank that is built in the shape of a boiler and placed on a car frame.

X.-Q. 24. On a flat car, isn't it?

A. Yes, sir.

X.-Q. 25. That is what is called a boiler-tank car, isn't it?

A. Yes, sir.

X.-Q. 26. Had your firm used many of those before
182 using these patent cars?

A. Yes, sir; we had used a number of them.

X.-Q. 27. What kind of satisfaction did they give in regard to transporting oil?

A. They gave very good satisfaction.

X.-Q. 28. Why did you change from the boiler tank cars to those compartment cars?

A. Because we thought we could make a saving by using this kind.

X.-Q. 29. What saving did you think you would make?

A. Ninety-five dollars a car.

X.-Q. 30. Just explain how you make that saving?

A. Because on those boiler tank cars we don't expect to make that saving in returning them to the East, while on these we do.

X.-Q. 31. Can you explain how it is that in returning the boiler tank car you have to pay ninety-five dollars, and in returning one of these compartment cars you don't have to pay ninety-five dollars? What difference is there in the cars that makes that difference?

A. I can give you my understanding.

X.-Q. 32. Well, do you know the fact?

A. Well, I know it is a fact that we don't pay ninety-five dollars on these compartment cars, while on the boiler tank cars we did.

X.-Q. 33. Isn't that due to the fact that in returning the compartment car the dry merchandise compartments can be utilized for carrying dry merchandise, whereas in carrying back the boiler tank car no dry merchandise can be carried?

A. That is my understanding of it.

X.-Q. 34. Have you ceased using the boiler tank cars entirely?

A. No, sir.

X.-Q. 35. You still use some of those?

A. Yes, sir.

X.-Q. 36. Now you say that Mr. Whittier and yourself designed those cars which you are using?

A. Yes, sir.

X.-Q. 37. When was that?

A. That is a matter of fact. I can't remember the exact date. I don't remember when these cars were made, whether they were made three years ago or four years ago, I can't tell.

X.-Q. 38. Do you know the Harrisburg Car Manufacturing Company of Harrisburg, Pennsylvania?

A. Yes, sir. That is where these cars were made, by Polloc & Company.

X.-Q. 39. Did they design and plan these cars?

A. They went into the details of it, but I say we designed that car, and gave the dimensions that we wished the car to be made.

X.-Q. 40. Did you make any drawings?

A. Mr. Whittier made drawings with his pencil; yes, sir.

X.-Q. 41. Where are those drawings?

A. I don't know. Perhaps he has them. I can't say. He is not a draughtsman. It was not an elaborate work at all. I think it took us half an hour to do it.

X.-Q. 42. When you say you designed it, state what you did?

184 A. We simply gave these parties the length of the cars, as I remember it, thirty-five feet, on which we wished this tank placed, and then we gave them the dimensions of the tank itself, the length, height and width, and showed the location of the tank in the center of the car, and also showed that slope in the tank from each end towards the center, at the bottom of the tank, the same as shown in that model.

X.-Q. 43. Did it show the dome in the top of the car?

A. Yes, sir; I think it did. They were instructed particularly in regard to that dome, how to construct it.

X.-Q. 44. And you sent that on to this Harrisburg Manufacturing Company and they built the cars?

A. Yes, sir; we did. They being car builders, they built the balance of the car according to their own ideas.

X.-Q. 45. Did I understand you to say that you didn't know there was any patent on this kind of cars?

A. No, sir; I didn't know it.

X.-Q. 46. When was it that you consulted your counsel the time that you referred to?

A. After making up our minds that we wanted to build

some of those cars. We consulted counsel about it. We first designed the car and then consulted with counsel and satisfied ourselves that we were safe in making the cars.

X.-Q. 47. Well, you knew that this patent had been granted to M. Campbell Brown at that time, didn't you?

A. All the information we had about that we got from Mr. Boone, as I remember. We didn't know about who the patent had been issued to, or that one had been issued, unless
185 we learned it from our counsel.

X.-Q. 48. You had seen similar compartment cars prior to the time you had designed yours, hadn't you?

A. I had seen some compartment cars that I understood belonged to the Standard Oil Company.

X.-Q. 49. Where were those cars?

A. They were at Fourth and Townsend streets. I think sometimes we used to receive oil in them. Something called my attention to them that I had seen them some time before.

X.-Q. 50. Did you examine those cars prior to getting up your design?

A. I think I examined one of those cars with Mr. Watson, of the Standard Oil Company, with reference to the amount of oil it contained. I never examined those cars with reference to getting up cars like them, or anything of that kind.

X.-Q. 51. But when you got up your design you knew what the construction of the cars of the Standard Oil Company was, didn't you?

A. I knew very nearly what the construction was.

X.-Q. 52. Why did you put your tank in the center of the car?

A. Because we thought that was the proper place to put it.

X.-Q. 53. Is it not a fact that you put it in the center of the car because the Standard Oil Company had theirs in the end.

A. No, sir; I can't say that that was it.

X.-Q. 54. Is it not a fact that in making your design
186 of the car you tried to utilize all the benefits and advantages there might be in the Standard Oil Company's cars, and at the same time try to avoid infringing upon their patent?

A. That may have entered into the arrangement, I can't say.

X.-Q. 55. Well, if you can't say, who can say, as long as you got it up?

A. That I don't know, who can say that.

X.-Q. 56. Did you take this design of yours to your counsel when you consulted him?

A. I don't know. Mr. Whittier saw Mr. Boone in regard to it, and whether he did or not I can't say.

X.-Q. 57. You were present with Mr. Whittier when he consulted Mr. Boone, I understood?

A. Well, I can't remember of seeing that drawing that Mr. Whittier made presented to Mr. Boone. I don't remember that. I was present on several occasions when consultations were had with Mr. Boone.

X.-Q. 58. Did he tell you that you had a right to go ahead and build cars of this kind?

A. Yes, sir.

X.-Q. 59. And that they wouldn't be infringements of Brown's cars?

A. Yes, sir.

X.-Q. 60. And then you went ahead and built them?

A. Yes, sir.

X.-Q. 61. Then it was your counsel got you into this scrape?

A. I don't know that we are in any scrape.

X.-Q. 62. Did you see this car which was brought up by Whittier, Fuller & Company from Mojave under orders of this Court some months ago and of which drawings and a 187 model were made for this case?

A. I saw those cars. I think there were two brought up from Mojave.

X.-Q. 63. One of those had a rectangular tank and the other a cylinder tank, didn't they?

A. Yes, sir. I know we built one cylinder tank, but whether that was the one that came there I can't say, it is so long ago, but I could find out.

X.-Q. 64. I will ask you who made this model "Exhibit" 1 which is in evidence here?

A. I don't know.

X.-Q. 65. When did you first see it?

A. I can't remember of seeing it until I saw it here on this table.

X.-Q. 66. Then, of course, you don't know what it was made from?

A. No, sir; I can't tell which particular car it was made from.

X.-Q. 67. In this Mohave car referred to where was the oil tank situated?

A. In the center of the car.

X.-Q. 68. What was the shape of the tank?

A. Which one do you mean. There were two.

X.-Q. 69. Well, I don't refer to the cylinder car at all.

A. The shape of the tank, as I remember it, is very nearly—I wouldn't say square, but I think it was twelve feet long by about eight feet wide, and the height I don't remember. It was rectangular shaped.

X.-Q. 70. What was the shape of the bottom of the tank?

A. The bottom of the tank slopes from each end towards the center, as I remember, slightly.

X.Q. 71. What was the shape of that part of the 188 floor of the car on which the tank rested?

A. I never examined. I never saw in between those partitions and consequently I can't say.

Y.-Q. 72. Wasn't that floor made in counterpart with the bottom of the tank?

A. I will say that I think it was built to correspond to the tank, but as far as knowing is concerned I couldn't say, because I never took the liberty to tear the partition down or tear out the side of the car.

X.-Q. 73. Do you know what kind of a partition there was on the side of the car between the tank compartment and the end compartment?

A. I remember noticing that partition particularly, but I didn't make such an examination as I could if I had torn the partition out. I could see they were nailed.

X.-Q. 74. You didn't take any portion of the partition down, then?

A. No, sir; I never touched it all.

X.-Q. 75. Then you don't know what the interior construction was there?

A. No, sir; I can't say, except I examined it from the top of the dome, but I couldn't see much from there.

X.-Q. 76. Did you look down through the top of the dome?

A. Yes, sir.

X.-Q. 77. What did you see?

A. I could see portions of the tank.

X.-Q. 78. There was considerable space between the top of the car and the top of the tank, wasn't there?

A. I think there is quite a space looking down from 189 the top to the center of the tank, but on the outside of the tank to the sides of the car I should say there was very little space.

X.-Q. 79. Do you know why you have this dome in your cars?

A. Yes, sir.

X.-Q. 80. What is the object of the dome?

A. So as to get at it handy, to get at the valve-stem that is inside of the tank, and also to take off this man-head as we call it for the purpose of either filling the tank or emptying it.

X.-Q. 81. What is the valve-stem which you have just referred to in your answer?

A. It is an iron rod which runs from the bottom of this tank up to nearly the top of this dome, and is fastened on the inside

of the dome so as to prevent the contents of the car from running out in transportation. This valve-stem is located, or should be, at the top. It is placed in position at the bottom of the car where the outlet is. The lower end of the valve is placed there.

X.-Q. 82. What does the valve-stem connect with at the bottom?

A. Connects with the pipe.

X.-Q. 83. What is the object of that pipe?

A. It is to prevent the liquid that is carried in the tank from escaping. Also underneath this is what we term the stop-cock, and this valve-stem was a kind of double guard against the tank's leaking in case the stop-cock should be turned accidentally in transporting the oil here. In other words, if that stop-cock should get open it would be stopped by what

190 we call the valve-rod.

X.-Q. 84. Where is the outlet to the tank?

A. In the bottom of the tank underneath the car.

X.-Q. 85. At what portion?

A. I should say right in the center, or very near the center. It may be a little to one side of the center owing to the construction of the car. I think it is. I think there are some timbers there in such a position that the outlet has to be a little to one side of the center.

X.-Q. 86. That outlet communicates with the lowest portion of the interior of the tank, does it not?

A. Yes, sir.

X.-Q. 87. What is the object of having it at the lowest portion of the tank?

A. So all the oil will run out in case the car sets level.

X.-Q. 88. That makes the tank perfectly self-draining, does it not?

A. That is it.

X.-Q. 89. Now, how did these compartment cars of yours work in actual practice, successfully or otherwise?

A. They worked very well indeed.

X.-Q. 90. Did you ever have any trouble in discharging them?

A. No, sir.

X.-Q. 91. Do you know whether there was any trouble in loading them, filling them?

A. I never heard of any difficulty whatever.

X.-Q. 92. They are so constructed then that they are easily loaded and easily discharged?

A. Yes, sir.

191 X.-Q. 93. What is the capacity of the tank of one of your cars?

A. I think between four and five thousand gallons.

X.-Q. 94. I understand that you use them for the purpose of transporting petroleum?

A. Petroleum and its products?

X.-Q. 95. What would be the value of one of those tanks full of petroleum, in round numbers?

A. When it leaves the East? Or what would be the value of a tank of coal oil in the East?

X.-Q. 96. Yes.

A. I should think three hundred or three hundred and fifty dollars.

X.-Q. 97. And from what points in the East has this oil been brought by you?

A. From Titusville and from Pittsburg, Pennsylvania, and I think from some other points that don't now present themselves to my mind.

X.-Q. 98. Mostly about the State of Pennsylvania I presume?

A. Yes, sir; I think so.

X.-Q. 99. How does the capacity of the tank of one of your compartment cars compare with the capacity of what you call the boiler tank cars?

A. Some of the boiler tank cars are smaller than ours, and some are very much larger.

X.-Q. 100. Take an average of them and how would they compare?

A. I think the average of the cylinder tanks are a little above the capacity of our compartment car tank.

X.-Q. 101. You said you didn't know of any other person or firm or corporation bringing oils from the East to this
192 Coast except the Standard Oil Company and Whittier, Fuller & Company?

A. I would like to change that.

Y.-Q. 102. Well, how do you want to change it?

A. I could name others that bring oil here, Mr. Miller. I think I could.

X.-Q. 103. Then, as a matter of fact, there are some other persons who are bringing oil here besides those two firms?

A. Yes, sir; there are.

X.-Q. 104. When you used this language in your examination-in-chief, "I should say that this model 'Exhibit 1,' would represent our car," did you mean by that to testify that that model represents all the details of construction of both the interior and exterior portions of that car?

A. No, sir. That is why I made that answer in the way that I did, because there is nothing about the car that I can see,

except the body of it, that represents our car. The details are all left out.

X.-Q. 105. As I understand, you are not familiar with the details of construction of the interior of your cars, never having examined them particularly; am I correct?

A. I am quite familiar with those we have constructed—those that we have had made; but when I answer you in regard to this model the way I do, is because my idea of a perfect model is that every portion of that car should be there, every bolt and every nail and every part, and the lettering on the car, and everything.

X.-Q. 106. Your idea is, that it bears a general resemblance outwardly to such portions as are visible to the eye from looking at the car;

193 A. Yes, sir; that is it. I can easily see that this model, "Exhibit 1," is not like our cars, in one respect at least, because the cover at the top is hinged at the side rather than towards one end.

X.-Q. 107. Then I understand you to say that you wouldn't undertake to say that this model, "Exhibit 1," was a correct model of your car?

A. So far as it goes, I wouldn't hesitate to say that it represents our car, but it goes but a short distance towards representing the car in its entirety.

X.-Q. 108. You have never taken away one of those partitions in your car, have you?

A. No, sir.

X.-Q. 109. Then of course you wouldn't undertake to say what that construction is, would you?

A. No, sir; I would not.

X.-Q. 110. Then you couldn't say that the construction of the partitions in this model, "Exhibit 1," is the same as the construction of the partitions of your car, could you?

A. I remember distinctly how the partition looked from the end compartments of the car.

X.-Q. 111. How did they look?

A. They looked like partitions of planed boards, I should say, eight or ten inches wide, nailed across the car.

X.-Q. 112. Then you wouldn't want your testimony to go any further than to that extent?

A. No, sir.

X.-Q. 113. And that is what you saw from the outside, looking at it.

A. Yes, sir.

194 X.-Q. 114. I will show you a patent which has been offered in evidence here and marked "Respondents' Ex-

hibit 2," and ask you whether or not you ever saw that patent before, or a car constructed like it?

(Question objected to by respondents as not proper cross-examination.)

A. I don't remember of ever seeing this patent.

X.-Q. 115. Well, did you ever see a car like it?

(The same objection by respondents.)

A. I can't say that I have.

X.-Q. 116. Now, I will ask you the same question in regard to this patent "Exhibit 3"?

(The same objection by respondents.)

A. No, sir, I never saw that patent, and I don't know that I ever saw a car constructed like it.

X.-Q. 117. I will ask you the same question with regard to the patent "Exhibit 4."

(The same objection by respondents.)

A. No, sir; I never saw this patent before, and I never saw any car constructed as this shows, to my knowledge.

X.-Q. 118. I will ask you the same question with regard to the patent "Exhibit 5."

(The same objection by respondents.)

A. I never saw the patent, and I never saw a car of the construction there represented. I have seen cars with tanks sitting on them, somewhere in the East, resembling that car some, but I couldn't say whether it was like this, or built after this patent at all.

195 X.-Q. 119. This patent simply shows an ordinary flat car with a tank sitting on the floor, does it not?

A. That is what it looks like.

X.-Q. 120. You say you saw a car somewhere in the East somewhat like this?

A. I have seen something like this somewhere, but I can't remember where.

X.-Q. 121. How many did you see?

A. I can't remember. I never noticed much. I made no examination whatever.

X.-Q. 122. When you were getting up your compartment car did you have in mind the construction of that car which you had seen?

A. No, sir.

X.-Q. 123. Now, I will ask you the same general question in regard to the patent "Exhibit 6," which represents another form of oil car. I will ask you whether you ever saw that patent, or a car constructed like it?

(Objected to by respondents as not cross-examination.)

A. I never saw that patent before, and I never saw a car constructed like that that I know of.

X.-Q. 124. I will ask you the same question in regard to the patent "Exhibit 7."

(The same objection by respondents.)

A. I never saw that patent, nor I never saw a car like it to my knowledge.

X.-Q. 125. I will ask you the same question in regard to the patent "Exhibit 8."

(The same objection by respondents.)

196 A. I never saw this patent before. I don't know that I ever saw a car constructed like this.

X.-Q. 126. At the time that you got up the design for your compartment cars, I understand the only cars you were familiar with were the boiler tank cars and the Standard Oil Company's cars?

A. Well, I would like to make this statement, that I have seen some cars near the Standard Oil Company's warehouse years ago that had a tank underneath, but whether they were anything like these that you showed me or not I can't say.

X.-Q. 127. Whose cars were those?

A. I understood they were the cars of the Standard Oil Company.

X.-Q. 128. Did you know anything about their operation, whether they were a success or not?

A. No, sir; I did not. I think the only information I ever got was from somebody connected with the Standard Oil Company. I had an impression that they were not a great success, but I don't know anything about it.

X.-Q. 129. How many cars were you familiar with, or had you known of, at the time you and Mr. Whittier got up your design for your car?

A. I never saw any but the boiler tank cars, and some of those that I said belonged to the Standard Oil Company with the oil tank in each end and the freight compartment in the middle. Those are all that I have given any attention to. I only examined the Standard Oil Company's tank with some one of their employees as a matter of business while we
197 were purchasing from them, measured the tank thoroughly to see if we were getting what we were paying for.

X.-Q. 130. Mr. Woods, do you know the Bear Creek Refining Company?

A. I know of them; yes, sir.

X.-Q. 131. Who are they?

A. The gentleman that I understand is the leading man in the concern is a man by the name of Campbell. They are a firm of oil refiners in Pennsylvania.

X.-132. Well, do you deal with them?

A. Yes, sir; we have dealt with them.

X.-Q. 133. Did they build any of these cars for you?

A. No, sir; not to my knowledge. They are not car builders as I understand it.

X.-Q. 134. Oh, they sell oil?

A. Yes, sir.

X.-Q. 135. You have bought oils from them?

A. We have bought oils from them on various occasions?

X.-Q. 136. Well, have you transported any of the oils that you bought from them in these compartment cars?

A. Yes, sir.

X.-Q. 137. I understood you to say that your cars were thirty-five feet in length; am I correct?

A. Yes, sir; you understood me to say that.

X.-Q. 138. And how high were they?

A. That I can't say. I don't remember.

X.-Q. 139. And how wide were they?

A. I think eight feet wide. I may be mistaken. That is a matter of fact that can be ascertained by measuring
198 the cars, which would be safer than taking my word for it.

(It is stipulated and agreed, by and between counsel for the respective parties herein, that the reading of the foregoing deposition to the witness, and the signing of the same by him, respectively, are waived.)

(Examination continued, in conformity with agreement of counsel, until Tuesday, January 20th, 1891, at half past ten o'clock A. M.)

199

FRIDAY, *January 30*, 1891.

Present: Mr. Miller, of counsel for complainant; Mr. Boone, of counsel for respondent.

Re-examination of LEWIS PETERSON, on behalf of complainant.

By Mr. MILLER:

Q. 1. Mr. Peterson, just look at this wooden model, and state if you know who made that model?

A. Yes, sir; that was made in my shop.

Q. 2. Under your direction?

A. Yes, sir.

Q. 3. From what was it made?

A. It was made from a blue-print fac simile of the drawing "Exhibit B."

Q. 4. Will you please state what portion of the drawing that model was made to represent?

A. The model was made especially to show the construction of the partition.

Q. 5. Does it correctly show the construction of the partition as delineated in this drawing "Exhibit B?"

A. It does.

Q. 6. That is the only portion of the drawing it was intended to represent, was it, the partition?

A. That is all.

(The model last above referred to is here introduced in evidence by complainant, and marked "Complainant's Exhibit I.")

200 (It is stipulated and agreed, by and between counsel for the respective parties herein, that the reading of the foregoing deposition to the witness, and the signing of the same by him, respectively, are waived.)

Re-examination of GEORGE W. UEFFINGER, on behalf of complainant.

By. Mr. MILLER:

Q. 1. Just look at this drawing, which you have already testified you made, marked "Exhibit B," and state how the partition therein represented compares with the construction of the partition represented in this wooden model, just introduced in evidence—"Exhibit I"?

A. It is the same as the drawing.

Q. 2. I will ask you what these bolts are intended to represent that appear at the bottom of Figure 2 of this drawing, "Exhibit B"?

A. They represent the holding-down bolts of the tank in the car.

Q. 3. Then I understand those bolts are connected with some device connected with the tank for holding that down?

A. Yes, sir.

Q. 4. And they are no part of the partition?

A. No, sir.

(It is stipulated and agreed, by and between counsel for the respective parties herein, that the reading of the foregoing deposition to the witness, and the signing of the same by him, respectively, are waived.)

201 Mr. BOONE: Respondents introduce in evidence model of combination car, marked "Respondent's Exhibit 9."

(It is agreed by both complainant and respondents that the model, "Exhibit 9," was made by Lewis Peterson, who has heretofore been examined as a witness on behalf of complainant, from the drawing and description contained in the letters patent sued on.

(Testimony closed.)

202

Certificate of Deposition.

I certify that the foregoing depositions were taken at the place stated in the caption to said depositions, at the several times set forth in said depositions, in my presence, and in the presence of counsel for the respective parties to the cause in said caption entitled; that, previous to giving his testimony, each of the witnesses in said depositions named was by me duly sworn to tell the truth, the whole truth and nothing but the truth, in said cause; that said depositions were taken down in shorthand writing and transcribed by A. L. Coombs, pursuant to stipulation and agreement of counsel; that said depositions, after being transcribed, were read by, or by me to said witnesses, and signed by them, respectively, except in those cases where such reading and signing were, by agreement of said counsel, waived, as in said depositions set forth: and that I have retained said depositions for the purpose of delivering the same with my own hand to the Court for which they were taken.

Accompanying said depositions, and forming part thereof, are the several exhibits introduced in connection therewith, and referred to and specified therein.

I further certify that I am not attorney nor of counsel for any of the parties to said cause, nor in any way interested in the event thereof.

In witness whereof, I have hereunto set my hand, this fourth day of February, A. D. 1891.

S. C. HOUGHTON,
Examiner in Chancery,
U. S. Circuit Court, Dist. of Cal.

(Endorsed:) Opened and re-filed Feb. 10, 1891. L. S. B. Sawyer, Clerk.

Exhibit "A."

M. C. BROWN.
Oil-Car.

No. 216,506.

Patented June 17, 1879.

Fig. 1.

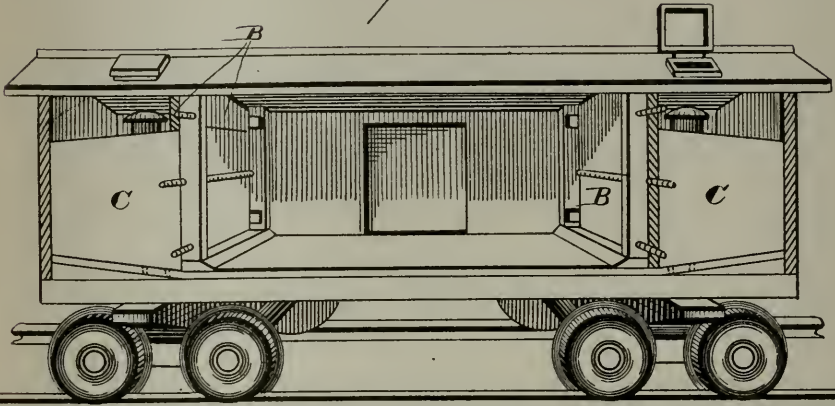
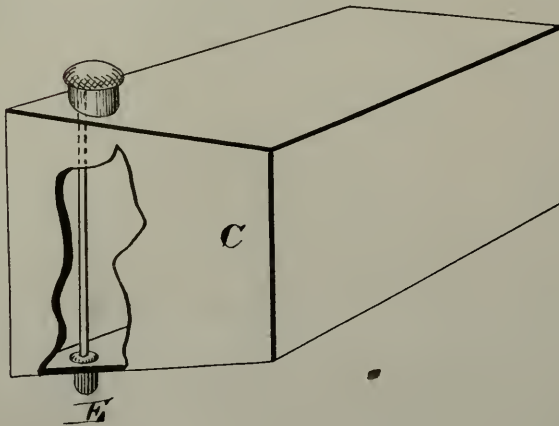


Fig. 2.



WITNESSES

E. J. Nottingham
A. M. Bright

INVENTOR

M. C. Brown
By Sargent & Sargent

203

Complainant's Exhibit "A."

UNITED STATES PATENT OFFICE.

M. Campbell Brown, of Cleveland, Ohio.

Improvement in Oil-Cars.

Specification forming part of Letters Patent No. 216,506, dated June 17, 1879; application filed January 7, 1879.

To all whom it may concern:

Be it known that I, M. Campbell Brown, of Cleveland, in the county of Cuyahoga, and State of Ohio, have invented certain new and useful improvements in Oil-Cars; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to cars, and especially to that class of cars designed for transporting merchandise and oil or other liquids; and it consists in the parts and combination of parts hereinafter described and claimed, whereby oils or other liquids may be safely transported in the same car with miscellaneous merchandise.

In the drawings, Figure 1 represents in side elevation, and with one side removed to show the internal arrangement and construction, a car according to my invention; and Fig. 2 is a detached view representing partly in section a tank or container for carrying oil or other fluids.

The object, as briefly above stated, of my device is to produce an improved form of car for the transportation of oils and liquids in bulk, and which shall also be adapted for the transportation of ordinary merchandise on roads where a load of oil or liquid cannot be obtained on return trip, thus obviating the necessity of hauling empty tank-cars over long distances, as is now commonly done; and to this end the construction of the ordinary freight-car is modified as follows: The car-space is divided into two or more compartments; but, for the purpose of the present specification, we will suppose it to be divided into three. The central compartment, as shown in the drawings, would embrace about two-thirds of the entire length of the car, and is designed and adapted for ordinary storage, and for this purpose may be constructed in any proper manner. The two end compartments occupy each about one-sixth of the entire length of the car, are located in the ends thereof, over the trucks, and are designed and constructed to contain metallic

tanks, substantially such as shown in Fig. 2, which tanks are adapted for safely containing and transporting oil or other liquid.

I prefer to provide partitions B to extend from the roof to the floor either of the car or tank, and these partitions I make readily adjustable in order that by their removal a ready inspection of the metal tanks may be had, also permitting, in case of necessity, the removal of said tanks, which are to be made small enough to pass through the door of the car.

The floor of the central compartment is made level throughout its entire extent; but in the end compartments, commencing at the point where the partitions B and the floor meet, it is gradually elevated toward each end of the car, thus affording a reliable drainage, which would secure the contents of the central compartment against damage should either tank leak.

In this connection I would suggest that the floor of the car beneath the tanks be sufficiently perforated to permit the escape of leaking fluid.

I also construct the tanks in such a manner as to secure a ready and perfect drainage of their contents in discharging. Their bottoms are inclined to fit on the bottoms of their respective compartments in the car, and from the lowest point of each of the same the discharge-pipe E leads.

The discharge-pipe E should be supplied with any suitable stop-cock arrangement or its equivalent.

In order to fill the tanks I make an opening through their top, which opening shall register with the door in the roof of the car, through which the tanks may be filled.

Not only should the floor of the car beneath that portion where the tanks are placed be formed on a slant corresponding with the slanting bottom of said tanks, but I also make the top of each tank inclined, and form their filling point at the highest part of the tank, so as to permit a free escape of air while filling.

The reservoirs or tanks referred to should be firmly secured in any manner to their place in the car against displacement during transit, and this may be done by stay-rods or anything of the kind.

I am aware that the several features embodied in my improvement are not independently new, and I restrict the invention to the specific combination of parts set forth in the claim.

What I claim is—

A car subdivided into two or more compartments, each end compartment containing an oil-tank, said tank constructed with an inclined or self-draining bottom, and resting upon a floor formed in counterpart thereto, said tank also having a

tapering or inclined top with a filling-opening placed at or near its highest point and in line with a filling-opening in the car-top, and there being a removable partition separating said tank from the next adjacent compartment, all combined substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

M. CAMPBELL BROWN.

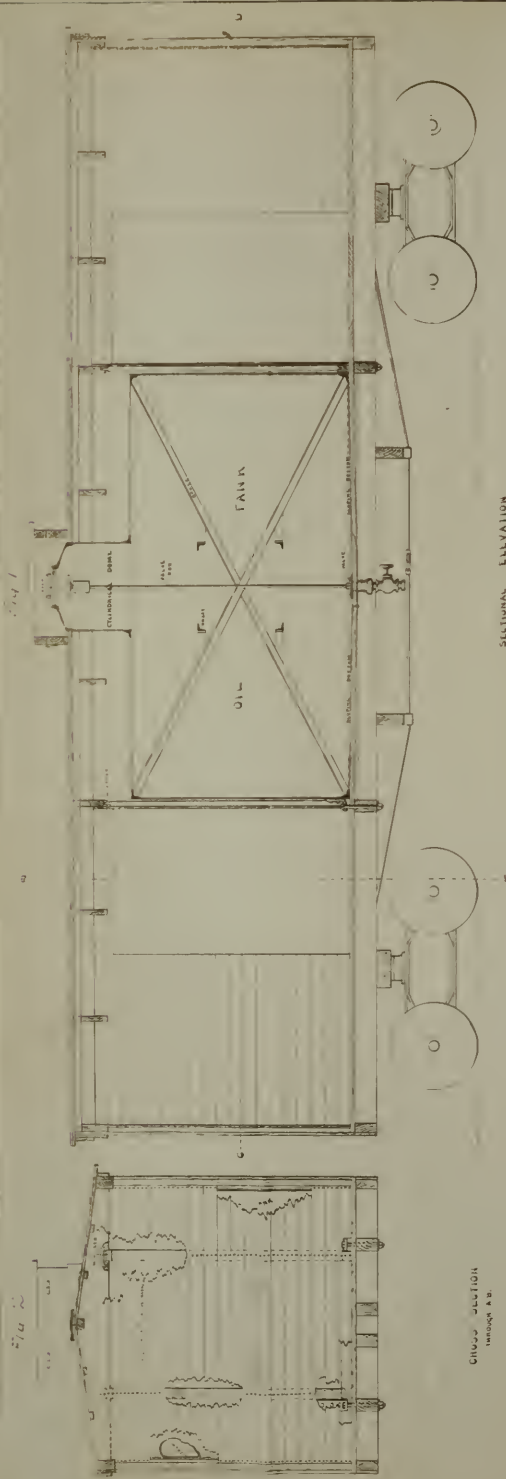
Witnesses:

JNO. CROWELL, JR.,

W. E. DONNELLY.

(Endorsed:) Opened and re-filed Feb. 10, 1891. L. S. B. Sawyer, Clerk,

Complainant's Exhibit "B."

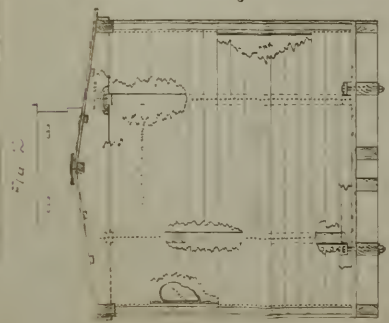


SECTIONAL ELEVATION

FIG. 4

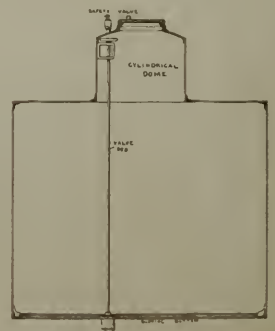


PLAN AND SECTION C.D.

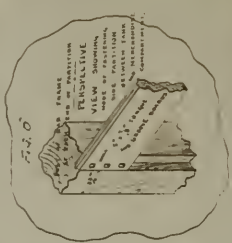
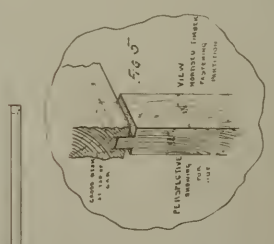


CYLINDRICAL SECTION

FIG. 3



CROSS SECTION OF TANK



Complainant's Exhibit "C."

FIG. 1

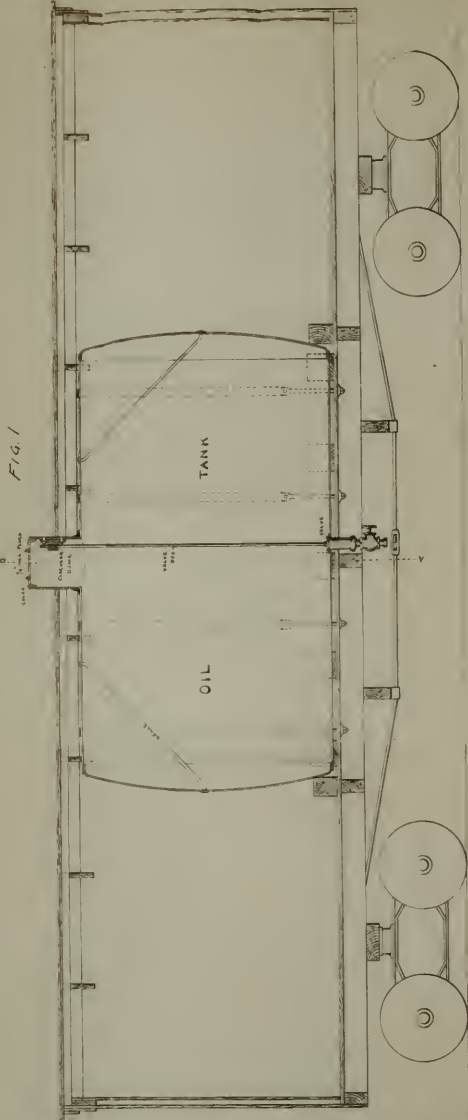
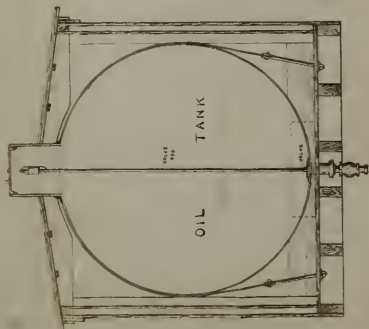
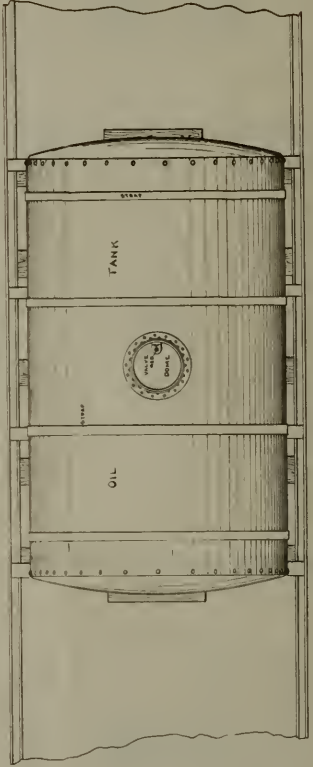


FIG. 2



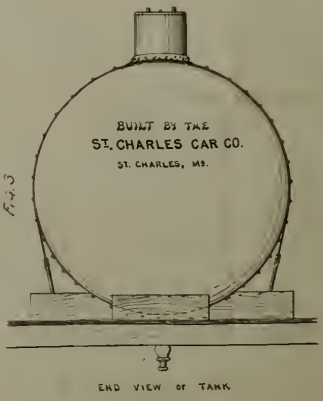
SECTIONAL ELEVATION

FIG. 4



PLAN SHOWING TANK IN FULL SIZE

FIG. 3



Handwritten notes in the left margin, including the number "100" and some illegible text.

206 U. S. Circuit Court, N. Dist. of Cal.

THE STANDARD OIL COMPANY, of Iowa, }
vs. } No. 10,575.
 THE SOUTHERN PACIFIC CO. }

Complainant's Exhibit E.

(Assignt. Brown to Continental Oil and Transpn. Co. of Ia.)

S. C. H., *Examiner.*

Whereas, M. Campbell Brown, of Cleveland, in the County of Cuyahoga, and State of Ohio, did obtain letters patent of the United States, No. 216,506, for a certain improvement in oil cars which letters patent bear date the seventeenth day of June, eighteen hundred and seventy-nine. And whereas, the Continental Oil and Transportation Co. of Council Bluffs, Iowa, are desirous of acquiring an interest therein. Now, therefore, this indenture witnesseth that for and in consideration of the sum of five thousand dollars, the receipt whereof is hereby acknowledged, I have granted, sold and set over unto the said Continental Oil and Transportation Co. of Council Bluffs, Iowa, all the right, title and interest which I have in the said invention as secured to me by said letters patent for, to and in the United States of America, the same to be held and enjoyed by the said Continental Oil and Transportation Co. for its own use and behoof, and for the use and behoof of its legal representatives to the full end of the term for which said letters patent are granted as fully and entirely as the same would have
 207 been held and enjoyed by me had this grant and sale not been made.

In testimony whereof I hereunto set my hand and affix my seal this tenth day of May, A. D. 1880.

[SEAL.]

M. CAMPBELL BROWN.

Sealed and delivered in presence of

ISAAC E. BLAKE,
GEO. S. GIVENSEZ.

THE STATE OF IOWA, }
Pottowattamie County, } ss.

I, John N. Baldwin, a notary Public within and for the County and State aforesaid, do hereby certify that M. Campbell Brown is personally known to me to be the identical person whose name is affixed to the foregoing deed of conveyance as grantor thereto, and that on this day said grantor personally appeared before me and acknowledged the execution of said deed and instrument of writing to be his voluntary act and deed.

In witness whereof I have hereunto set my hand and affixed my official seal this 10th day of May, A. D. 1880.

[SEAL.]

JOHN N. BALDWIN,
Notary Public.

U. S. Patent Office received for record May 14, 1880. Recorded Liber K, 25, page 262.

(Endorsed:) Filed Feb. 10, 1891. L. S. B. Sawyer, Clerk.

208 U. S. Circuit Court, N. Dist. of Cal.

STANDARD OIL CO. OF IOWA,	}	No. 10,575.
<i>vs.</i>		
SOUTHERN PACIFIC CO.		

Complainant's Exhibit "F."

(Assignt. Continental Oil, &c. Co. of Cal. to Standard Oil Co.)

S. C. H., *Examiner.*

Received for record June 19, 1889, and recorded in Liber R, 40, page 61 of Transfers of Patents. In testimony whereof I have caused the seal of the Patent Office to be hereunto affixed.

[SEAL.]

C. E. MITCHELL,
Commissioner of Patents.

Exd. F. C. T.

Whereas, the Continental Oil and Transportation Company of California is the owner for the whole of the United States of America of certain Letters Patent Number 216,506, issued to M. Campbell Brown on the 17th day of June, A. D 1879, for a certain improvement in oil cars, for the purpose of transporting oils or fluids; and whereas, the said Continental Oil and Transportation Company of California, a corporation organized and existing under and by virtue of the laws of the State of California, is desirous of selling to the Standard Oil Company, a corporation organized and existing under and by virtue of the laws of the State of Iowa, and the said last mentioned corporation is desirous of acquiring said letters patent and all interests therein or thereunder.

209 Now therefore, this indenture witnesseth that for and in consideration of the sum of one dollar to the said Continental Oil and Transportation Company of California in hand paid by the said Standard Oil Company, and of other and valuable considerations the receipt of which is hereby acknowledged, the said Continental Oil and Transportation Company of California has sold, assigned, transferred, set over and conveyed, and by these presents does hereby sell, assign, transfer, set over and convey unto the said Standard Oil Company, its successors and assigns, all the right, title and interest which the

said Continental Oil and Transportation Company of California ever has had, or now has in, to, or under the said letters patent and the invention thereby secured and all improvements upon the same, and hereby grants to the said Standard Oil Company its successors and assigns forever, the exclusive right and privilege to make, construct, run, employ, have and use all and singular the kinds of cars mentioned in the said letters patent, at, to, from and between all points and places in the United States and Territories thereof, and to transport any oils or fluids in cars of the style, capacity and workmanship of those at one time furnished by Wells, French & Co., of Chicago, Illinois, to the Continental Oil and Transportation Company, a corporation organized and existing under and by virtue of the laws of Iowa, and embracing all and singular the improvements covered by the above described letters patent, the same to be held and enjoyed by the said Standard Oil Company for its own sole and exclusive benefit, and for the sole and exclusive benefit of its successors and assigns, for and during the entire remainder of the term for which said letters patent were granted, or for which letters patent may be granted for improvements thereon, as fully and entirely as the same would or might have been enjoyed by the said Continental Oil and Transportation Company of California had this sale, assignment and grant not been made.

In witness whereof, the said Continental Oil and Transportation Company of California has hereunto caused its corporate name and seal to be affixed by its Vice-President and Secretary thereunto duly authorized, on the 1st day of July, A. D. 1885.

CONTINENTAL OIL AND

TRANSPORTATION CO. OF CAL.

[SEAL.]

By GEO. LOOMIS,
Vice-Prest.

Attest: HARRY L. TEVIS,
Sect'y.

211 STATE OF CALIFORNIA, }
City and County of San Francisco, } ss.

On this twenty-third day of July, A. D. one thousand eight hundred and eighty-five, before me, Holland Smith, a notary public in and for said City and County, residing therein, duly commissioned and sworn, personally appeared George Loomis, known to me to be the Vice-President, and Harry L. Tevis, known to me to be the Secretary of the Continental Oil and Transportation Company of California, the corporation that executed the within instrument, and acknowledged to me that such corporation executed the same.

In witness whereof, I have hereunto set my hand and affixed

my official seal, at my office, in the City and County of San Francisco, the day and year last above written.

[SEAL.]

HOLLAND SMITH,

Notary Public.

307 Montgomery St.

(Endorsed:) U. S. Patent Office, June 19, 1889. Recorded. Opened and refiled Feb. 10, 1891. L. S. B. Sawyer, Clerk.

212 U. S. Circuit Court, N. Dist. of Cal.

STANDARD OIL Co.

vs.

THE SOUTHERN PACIFIC Co.

} No. 10,575.

Complainant's Exhibit G.

S. C. H., *Examiner.*

Whereas, the Continental Oil and Transportation Company is the owner for the whole of the United States of America of certain Letters Patent No. 216,506, issued to M. Campbell Brown, on the 17th day of June, A. D. 1879, for a certain improvement in oil cars, for the purpose of transporting oils or fluids; and

Whereas, the said Continental Oil and Transportation Company, a corporation organized and existing under and by virtue of the laws of the State of Iowa, is desirous of selling to the Continental Oil and Transportation Company of California, a corporation organized and existing under the laws of said last mentioned State, and the said last mentioned corporation is desirous of acquiring said letters patent and all interests therein or thereunder:

Now, therefore, this indenture witnesseth that for and in consideration of the sum of one dollar, to the said Continental Oil and Transportation Company, in hand paid, by the said Continental Oil and Transportation Company of California, and of other valuable considerations, the receipt of which is hereby acknowledged, the said Continental Oil and Transportation

213 Company has sold, assigned, transferred, set over and convey unto the said Continental Oil and Transportation

Company of California, its successors and assigns, all the right, title and interest which the said Continental Oil and Transportation Company ever has had, or now has, in, to or under the said letters patent and the invention thereby secured, and all improvements upon the same, and hereby grants to the said Continental Oil and Transportation Company of California, its successors and assigns, forever, the exclusive right and privilege to make, construct, run, employ, have and use,

all and singular, the kinds of cars mentioned in the said letters patent, at, to, from and between all points and places in the United States and the Territories thereof, and to transport any oils or fluids in cars of the style, capacity and workmanship of those at one time furnished by Wells, French & Co., of Chicago, Illinois, to the said Continental Oil and Transportation Company, and embracing, all and singular, the improvements covered by the above described letters patent, the same to be held and enjoyed by the said Continental Oil and Transportation Company of California, for its own sole and exclusive benefit, and for the sole and exclusive benefit of its successors and assigns, for and during the entire remainder of the term for which said letters patent were granted or for which any letters patent may be granted for improvements thereon, as fully and entirely as the same would or might have been
 214 enjoyed by the said Continental Oil and Transportation Company had this sale, assignment and grant not been made.

In witness whereof, the said Continental Oil and Transportation Company has hereunto caused its corporate name and seal to be affixed this 10th day of May, 1884.

CONTINENTAL OIL AND
 TRANSPORTATION COMPANY,
 By ISAAC E. BLAKE,
President.

Attest, GEORGE F. WRIGHT,
Secretary.

[Corporate
 Seal.]

(Endorsed:) Opened and re-filed Feb. 10, 1891. L. S. B. Sawyer, Clerk.

215 U. S. Circuit Court, N. Dist. of Cal.

STANDARD OIL Co. }
 vs. } No. 10,575.
 SOUTHERN PACIFIC Co. }

Complainant's Exhibit "H."

S. C. H., *Examiner.*

The following resolution was passed at a meeting of the Directors of the Continental Oil and Transportation Company of Council Bluffs, Iowa, on this tenth day of May, 1884.

On motion of Barrett, seconded by Barton, it was unanimously resolved that this corporation sell, assign, transfer, set over, convey and grant unto the Continental Oil and Transportation Company of California, a corporation organized and

existing under and by virtue of the laws of the State of California.

First—All the right, title and interest of this corporation for, to and in the whole of the United States of America, excepting only the States of Michigan, Ohio and Pennsylvania, in, to or under certain letters patent and each of the same numbered numbers 4788, 40,468, and B. 6813, and bearing date respectively March 5th, 1872, November 3rd, 1863, and March 18th, 1873, for a certain invention and improvement thereon, known as the "Combined Oil and Freight Car," for carrying petroleum and freight.

Second—All the right, title and interest which this corporation ever has had, or now has, in, to or under certain letters patent of the United States of America, numbered 216 216,506, issued to M. Campbell Brown, on the 17th day of June, A. D. 1879, for a certain improvement in oil-cars, for the purpose of transporting oils or freight, and also the exclusive right and privilege to make, construct, run, employ, have and use all and singular the kinds of cars mentioned in said letters patent, at, to, from and between all points and places in the United States and Territories thereof, and to transport any oils or fluids on cars of the style, capacity and workmanship of those at one time furnished by Wells, French & Company of Chicago, Illinois, to this corporation, and embracing all and singular the improvements covered by the above letters patent.

Third—All the right, title and interest of this corporation, of, in, to and under a certain invention made and invented by one George W. Cummings, of Council Bluffs, Pottowatomie County, Iowa, and named and known as the "Combination Freight Car" of said Cummings, for which said invention said Cummings has made application for letters patent; also all the right, title and interest of this corporation, of, in, to or under any letters patent that may be paid for, or to secure said invention which letters patent this corporation hereby resolves that it will covenant and agree to assign and transfer to the said Continental Oil and Transportation Company of California on demand, also all the right, title and interest of this corporation in, to, or under any future inventions or improvements which the said Cummings may make, or invent from time to 217 time relating to the oil business, or the handling and conveyance of oils and fluids, and also all right, title and interest of this corporation in, to or under the same, whether by letters patent or otherwise, in or for contemplated inventions in tanks, barrels, cars, or any other article or thing required or to be required in the traffic, transfer or handling of oils, and it is hereby resolved that this corporation warrant the title thereto.

And the President and Secretary of this corporation are hereby authorized and directed to execute and deliver to the said Continental Oil and Transportation Company of California, for and on behalf of this corporation, and in its name and under its corporate seal, all assignments and other instruments necessary to carry this resolution into effect.

OFFICE OF THE CONTINENTAL OIL

AND TRANSPORTATION COMPANY OF COUNCIL BLUFFS.

I, Charles S. Barrett, Secretary of the Continental Oil and Transportation Company of Council Bluffs, a corporation duly organized and incorporated under and by virtue of the laws of the State of Iowa, do hereby certify and declare that the foregoing is and constitutes a full, true and correct transcript and copy of a resolution of the Board of Directors of said corporation, as the same appears of record in the official minute book of said corporation, and that said resolution was duly adopted and passed at a meeting of said Board of Directors duly held at the office and principal place of business of said corporation, on the tenth day of May, 1884, pursuant to personal notice personally given to and served upon each and every one of the Directors thereof; and that said resolution is still in full force and effect and has never been in any way altered or repealed.

In witness whereof I have hereunto set my hand and affixed the corporate seal of said The Continental Oil and Transportation Company of Council Bluffs, this 30th day of April, A. D. 1890.

CHARLES S. BARRETT,

Secretary of The Continental Oil and Transportation Company of Council Bluffs.

(Endorsed:) Opened and refiled Feb. 10, 1891. L. S. B. Sawyer, Clerk.

Respondents' Exhibit 2.

UNITED STATES PATENT OFFICE.

Horatio G. Brooks, of Dunkirk, New York.

Improvement in Tank and Freight Cars.

Specification forming part of Letters Patent No. 190,542, dated May 8, 1877; application filed November 14, 1876.

To all whom it may concern:

Be it known that I, Horatio G. Brooks, of Dunkirk, in the County of Chautauqua and State of New York, have invented a new and improved railway car, for carrying petroleum and other liquid in bulk, of which the following is a specification:

The object of this invention is to render practicable the shipment overland of any kind of merchandise, even grain, in bulk, without injury, as return-freight for petroleum or other liquid in bulk.

To this end, I construct a box-car with a base consisting of a tank, and formed with a drop extending down between the trucks, so as to increase the capacity of the tank, and serve as a truss for the frame. The draft and thrust are sustained by intermediate longitudinal sills, with spaces between them to accommodate the draw-head fixtures. The attachments of the draw-heads and the box-frame are made independently of the tank-plates or their fastenings, so that any rupture of the said attachments cannot communicate with the interior of the tank or endanger leakage. The discharge part of the tank is closed by a valve, protected by a lock and key, and either the same or a separate port is used for filling.

In the accompanying drawings, Figure 1 is a side elevation of a car, illustrating the invention. Fig. 2 is a central vertical longitudinal section of the same on a larger scale. Fig. 3 is a horizontal section on the line 3 3, Fig. 2. Fig. 4 is a transverse section on the line 4 4, Fig. 2. Fig. 5 is a partial section, illustrating the mode of attaching the box-frame and sills to the base-frame or tank. Fig. 6 is a longitudinal section, illustrating modifications in the draft-connection and in the box-framing. Fig. 7 is a horizontal section on the line 7 7, Fig. 6. Fig. 8 is a detached sectional view of one mode of attachment of iron posts for the box-frame. Fig. 9 is an illustration of a mode of attachment for ventilating or other pipes.

Like letters of reference indicate corresponding parts in the several figures.

The main sills SS^2 of this improved car, instead of being constructed from wood, are constructed of iron or steel channel

or **T** beams, as preferred; and to these sills is riveted plate iron or steel **T**, which, together with said iron or steel sills, forms the tank.

The sills, instead of being eight inches deep, as in an ordinary car, are preferably twelve or more inches deep; and in order to obtain a chamber or chambers of the full capacity for carrying the standard load of three thousand six hundred gallons, with a low center of gravity, in a box-car of ordinary height, the tank is dropped in the center, as shown, or, in other words, is constructed with a drop or belly, **B**, between the trucks, which extends the space between the sills, and also forms a complete truss for the latter.

The channel-beams, which form the outer sills **S**, as shown, are arranged with their flanges projecting outward; and to these flanges, at top, cast or wrought iron pockets **P** are bolted or riveted, to receive the posts P^2 P^3 of the upper frame-work.

This upper frame-work is intended to be either of wood, as shown in Figs. 2, 4 and 5, or of iron, as shown in Figs. 6 and 8. The sheathing will be of wood or iron, as preferred in either case.

The deck or wooden floor **F** is fastened down upon the top of the tank **A** by the lower board of the horizontal inner sheathing **R**, which is fastened to the frame-posts over the ends of the floor-planks.

Longitudinal timbers **Q**, bolted to the upper flanges of the outer sills, form spike-holds for the outside sheathing **R'**.

The trucks and brakes may be of any suitable construction. The bolsters **O** are bolted to the lower flanges of the sills **S** S^2 . This attachment may be re-enforced in any approved way.

The space between the channel-beams which form the intermediate sills S^2 , as shown, is left open at the ends for a sufficient distance, to accommodate the attachments or fixtures of the draw-heads **D**. The check-pieces or guides **I** of the draw-bars are made of stout angle-iron, and attached by bolting or riveting through the iron plates T^2 and the lower flanges of the intermediate channel-beams or sills S^2 , independently of the fastenings which connect the tank-plates themselves to the channel-beams. An attachment is thus afforded possessing all the necessary strength for draft and thrust, and the draft is transferred directly to the longitudinal sills.

If preferred, the space between the intermediate channel-beams is formed into a passage-way extending the whole length of the car, as illustrated in Figs. 6 and 7, and the draw-heads connected to each other by rods *d*, so as to secure a continuous draft throughout the train. In either case the draft attachments, as well as the box-frame attachments, are entirely independent of the fastenings of the tank-plates, so that the break-

ing or tearing away of any of these attachments cannot open any communication with the interior of the tank or cause a leak.

Each end sill E of the improved car is formed of a heavy plate of iron sufficiently strong to admit of the attachment thereto of buffer-plates C. Between the end plates and said buffer-plates rubber cushions B² are arranged so as to abut against the ends of the intermediate channel-beam S².

For filling and discharging the liquid a neck, N, is provided at the lowest point of the bottom. If preferred, a separate neck may be provided at the top for filling, but the oil is readily introduced through a hose applied to the discharge-neck, and communicating either with a pump or an elevated reservoir. The style, number and arrangement of these necks may vary. A peculiar valve mechanism for effecting and controlling the discharge is shown in Figs. 1, 2 and 4. A conical valve, *v*, opens inward, and is provided with a screw-stem, *s'*, which passes through a central orifice in a cage, *c*, on top of which is a concentric beveled pinion, *p*, meshing with a like pinion, *p*², on the inner end of a horizontal shaft, *s*. This shaft extends outward to one side of the tank, and is supported at its inner end by a branch, *b*, springing from the cage *c*. Its outer end passes through a stuffing-box, U, and is constructed with a square to receive a key or wrench. The screw-stem is made rotary, and the bore of the cage screw-threaded, or the screw-stem is splined in the latter, and the bore of the horizontal pinion screw-threaded, so that the valve will be raised and lowered by rotating the shaft *s*. To prevent any tampering with the valve or access to the shaft *s* by unauthorized parties, a hasp, *h*, fitting over the square end of the shaft, is attached to the side of the tank, and adapted to be secured by a lock or seal.

For carrying off any gas which may form in the tank, and at the same time to provide for expansion and contraction, pipes G are arranged at the several corners of the car, extending upward through the roof. To prevent the accidental ignition of the gas escaping from the upper ends of these pipes, shields of wire-gauze or its equivalent are applied thereto.

A man-hole, M, is formed in the top of the tank, and provided with a sunken lid or cap, so as to be covered by the flooring of the car, access thereto being unnecessary, except repairs should be needed.

The same construction in substance is applicable to platform-cars or gondolas, as well as to box-cars.

Having thus described my invention, the following is what I claim as new and desire to secure by letters patent—

1. The tank A, forming the sills or bottom frame-work of a car, as herein set forth.

2. The tank A constituting the base-frame of a box-car, constructed with a central portion dropped between the trucks, for the combined purpose of constituting a portion of the truss-frame, adding carrying capacity, and lowering the center of gravity of the load.

3. The intermediate sills S², employed to sustain the draft and thrust, in combination with a tank located in the base of the car or projecting down between the trucks, as set forth.

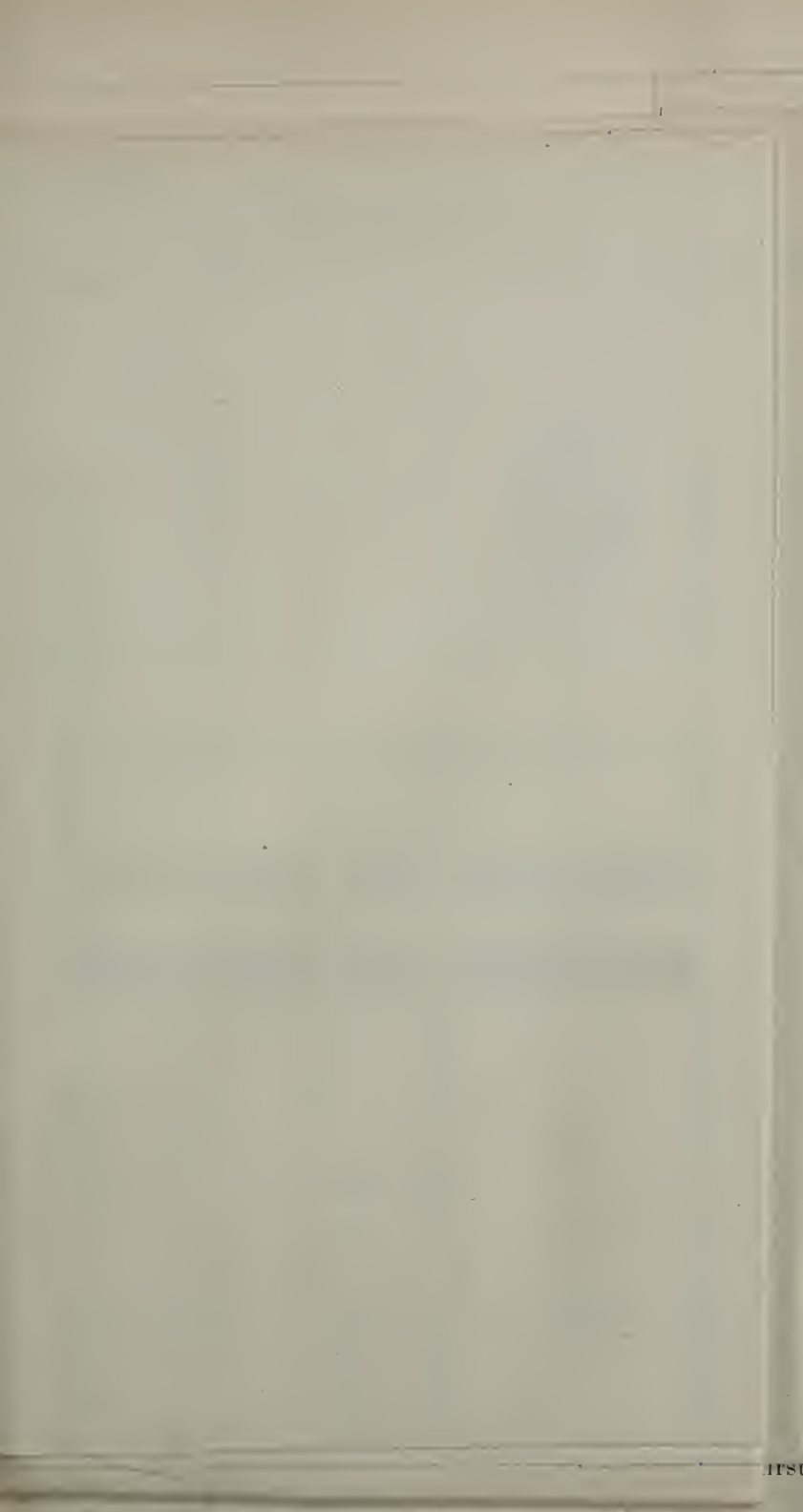
4. A tank constructed with an open space or spaces between the intermediate sills, to accommodate the draw-head fixtures.

HORATIO G. BROOKS.

Witnesses:

OCTAVIUS KNIGHT,
WALTER ALLEN.

(Endorsed:) Opened and re-filed Feb. 10, 1891. L. S. B. Sawyer, Clerk.



H. G. BROOKS.

TANK AND FREIGHT CAR.

No. 190,542.

Patented May 8, 1

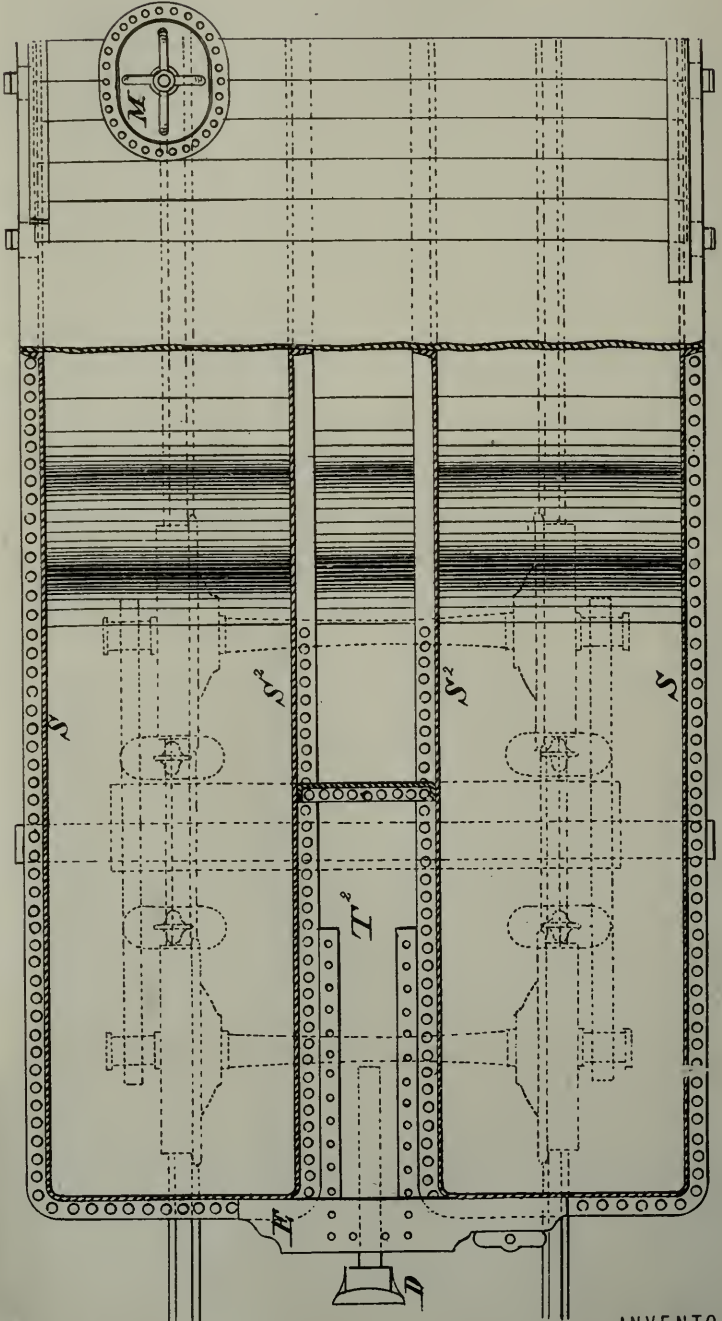


Fig. 3.

WITNESSES

Chas. Gooch

INVENTOR

H. G. Brooks



H. G. BROOKS.
TANK AND FREIGHT CAR.

No. 190,542.

Patented May 8,

Fig. 4.

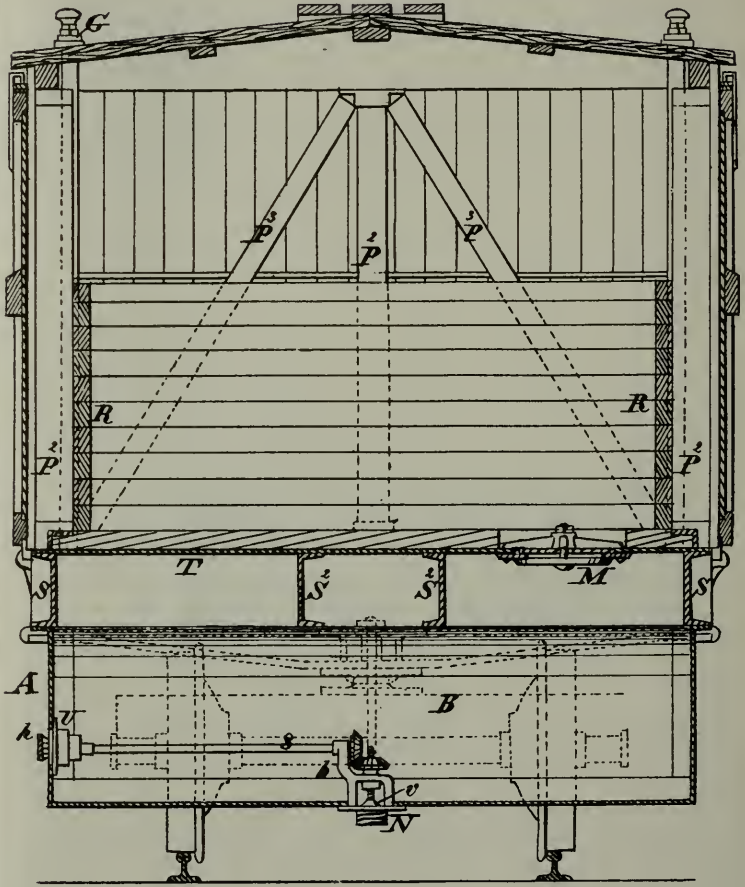
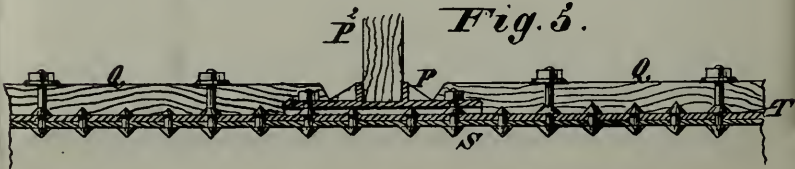


Fig. 5.



WITNESSES

Chas. Gooch

INVENTOR

H. G. Brooks

H. G. BROOKS.

TANK AND FREIGHT CAR.

No. 190,542.

Patented May 8,

Fig. 4.

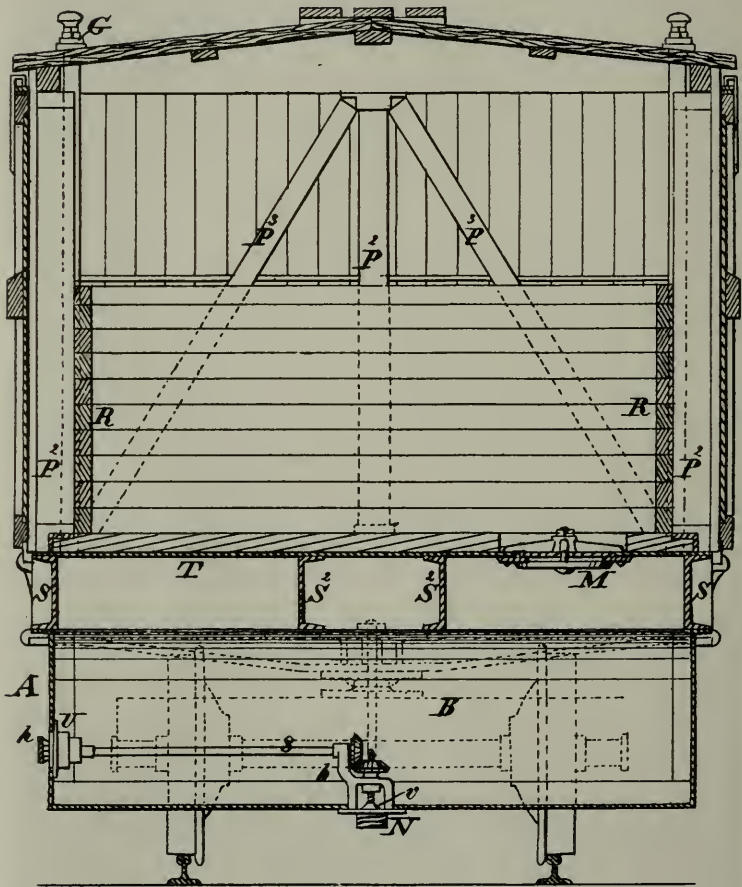
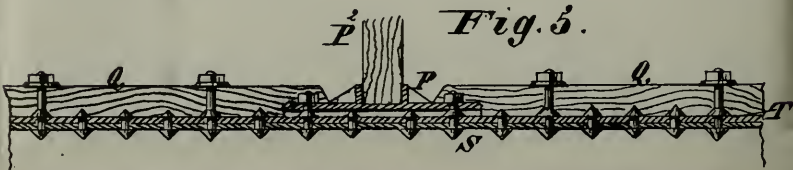


Fig. 5.

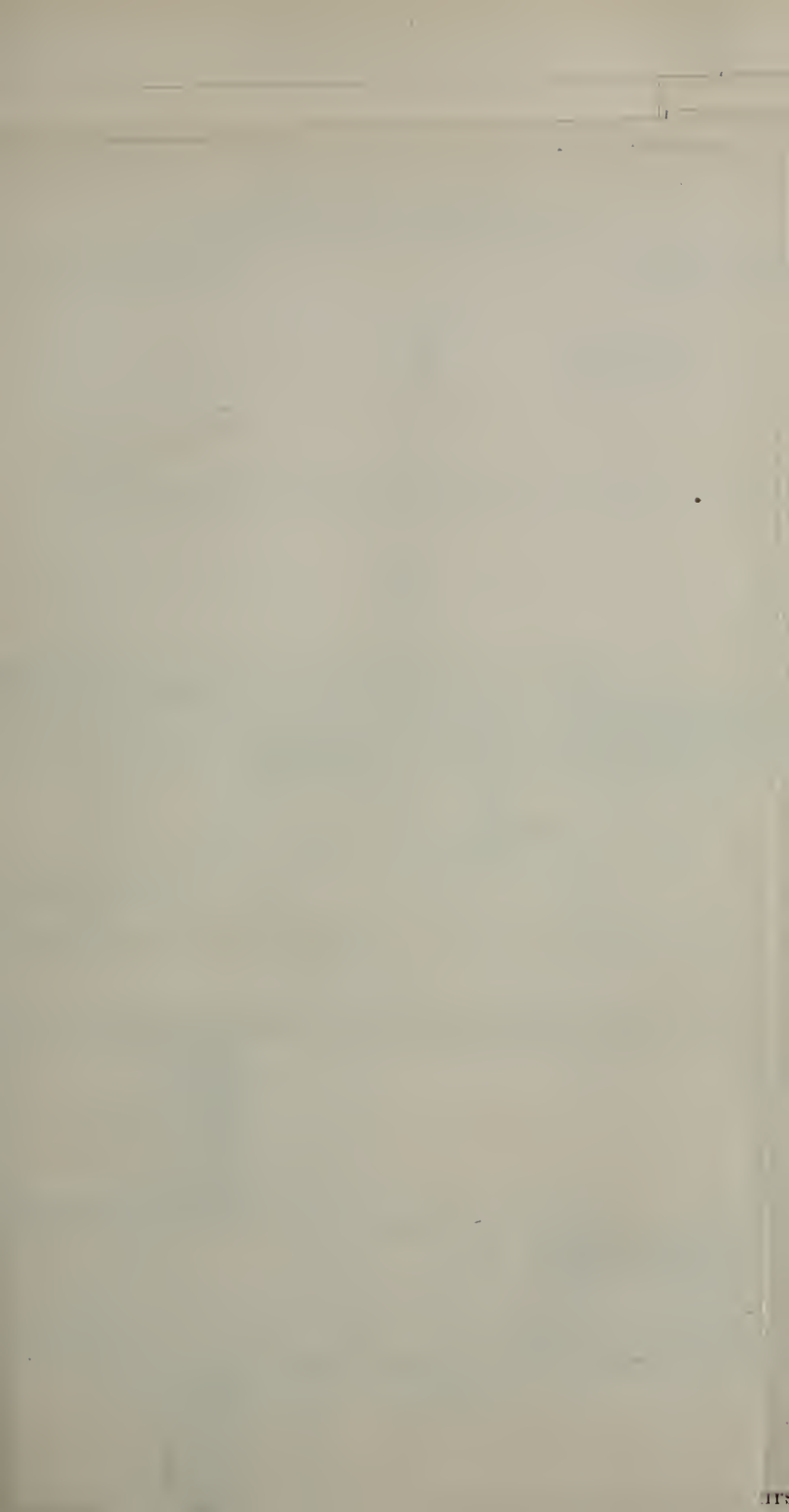


WITNESSES

Chas. Gooch

INVENTOR

H. G. Brooks



H. G. BROOKS. TANK AND FREIGHT CAR.

No. 190,542.

Patented May 8,

Fig. 6.

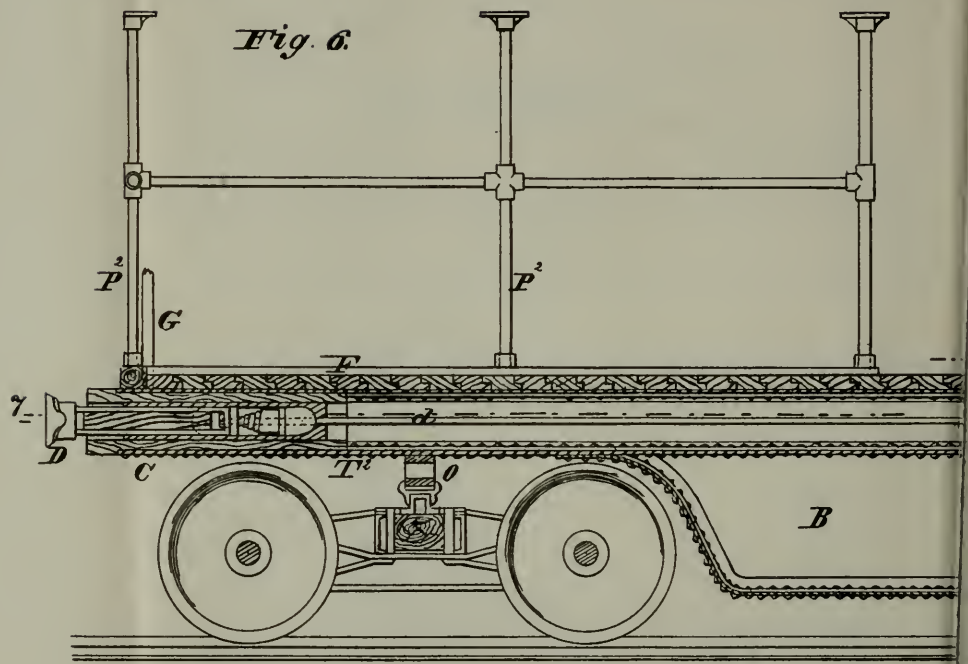
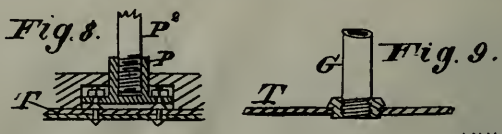
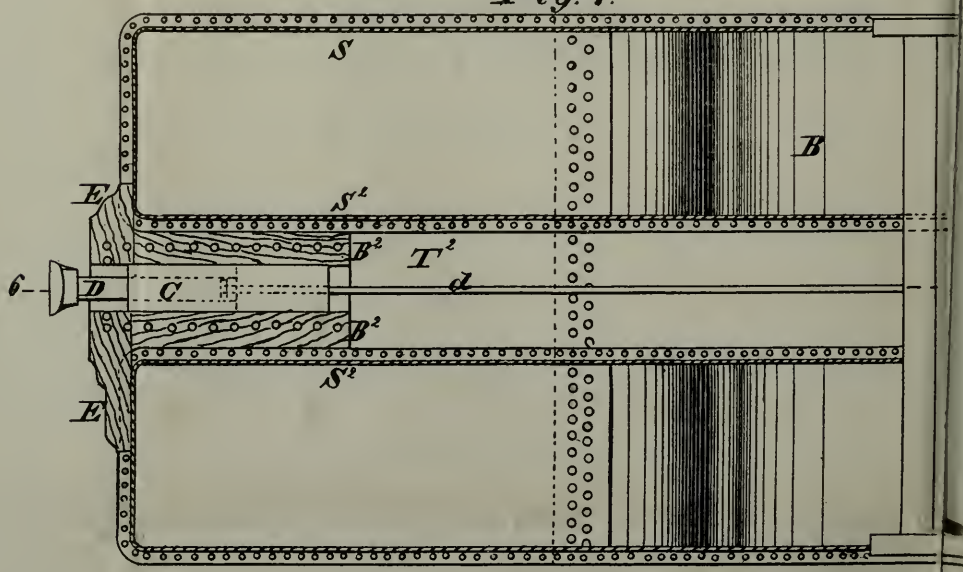


Fig. 7.

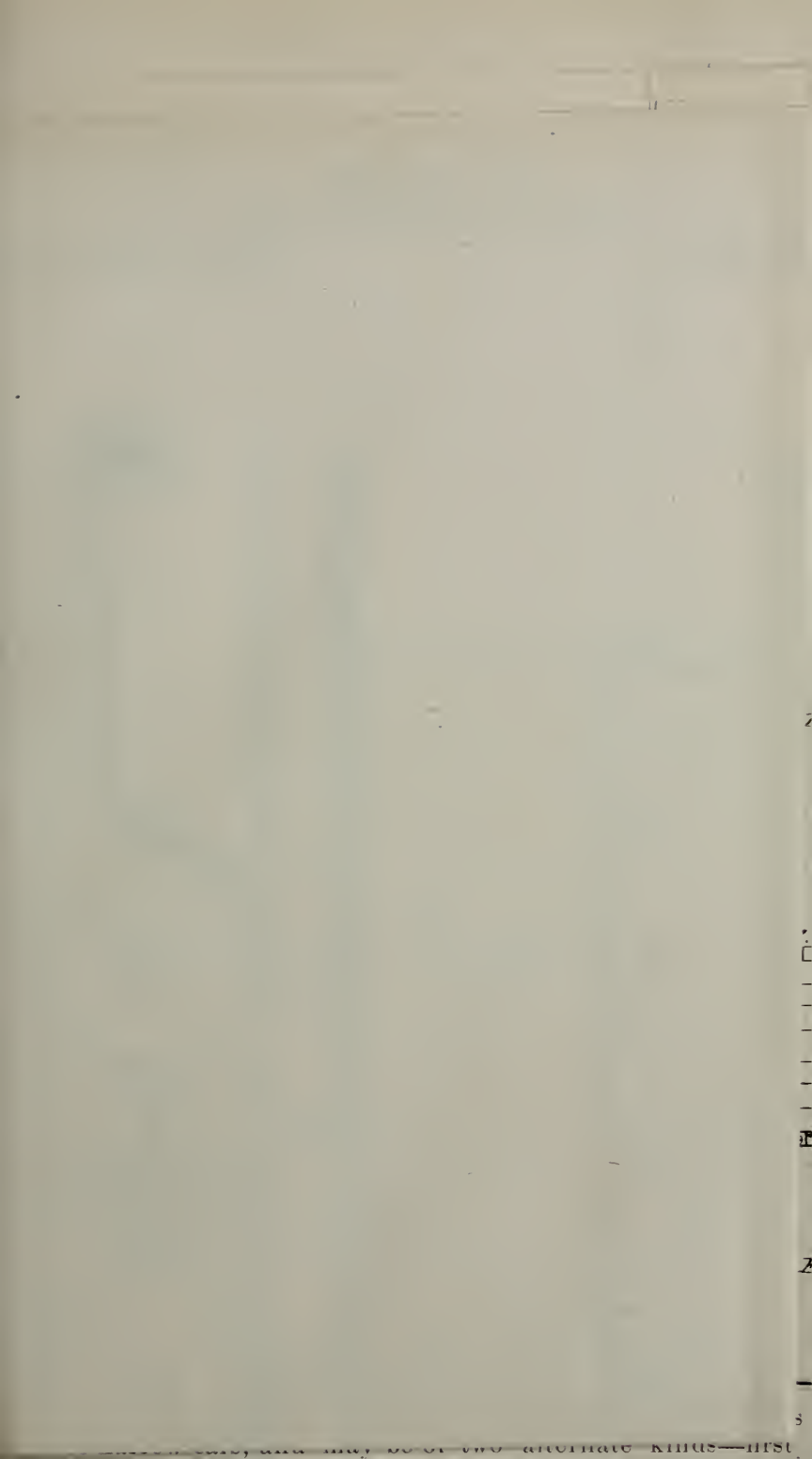


WITNESSES

Chas. J. Good

INVENTOR.

H. G. Brooks



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□

■

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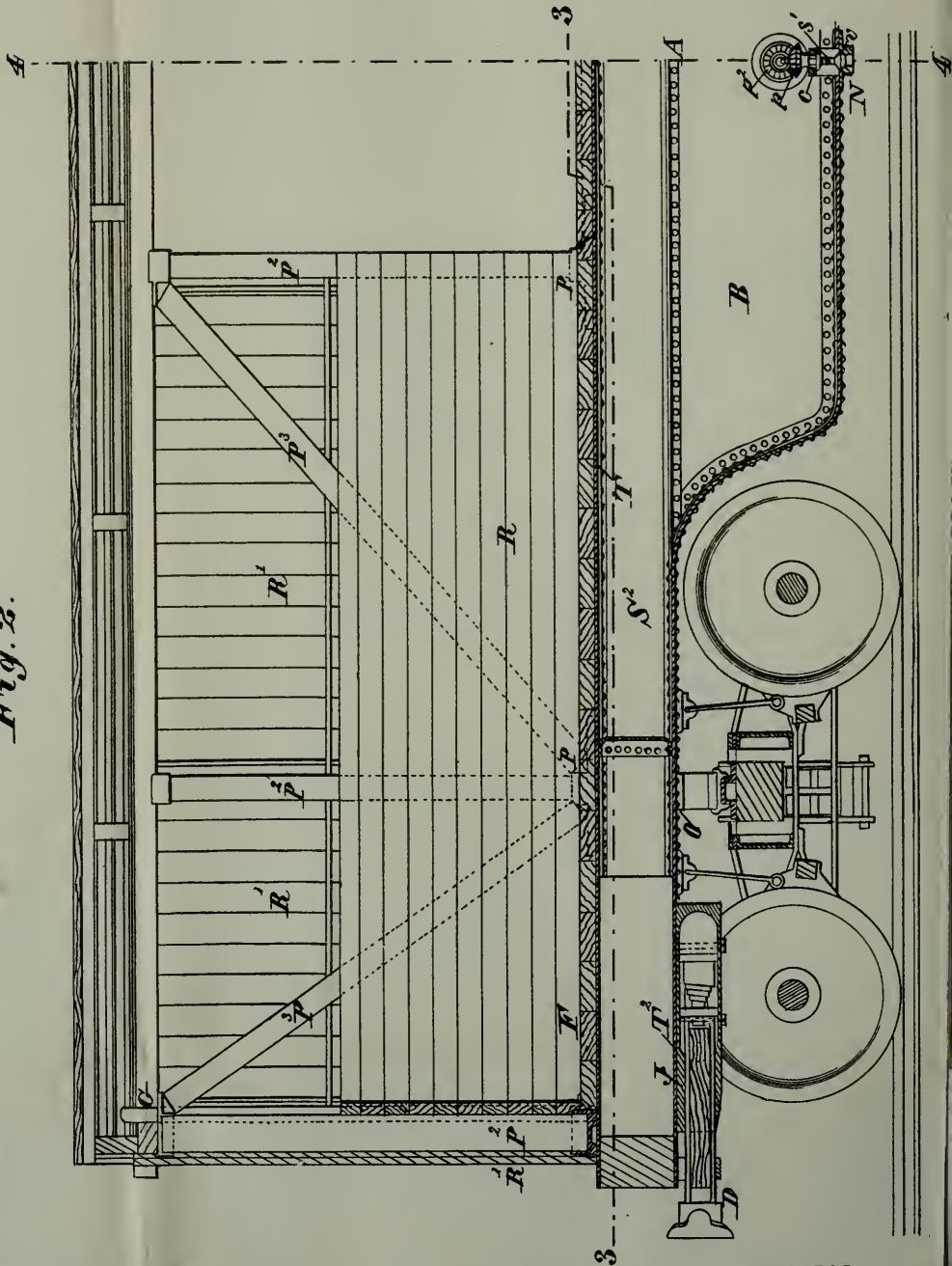
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H. G. BROOKS.
TANK AND FREIGHT CAR.

No. 190.542.

Patented May 8, 1877

Fig. 2.



WITNESSES

Chas. Hoock
Le. B. Burdett

INVENTOR

H. G. Brooks
By [Signature] Attorney

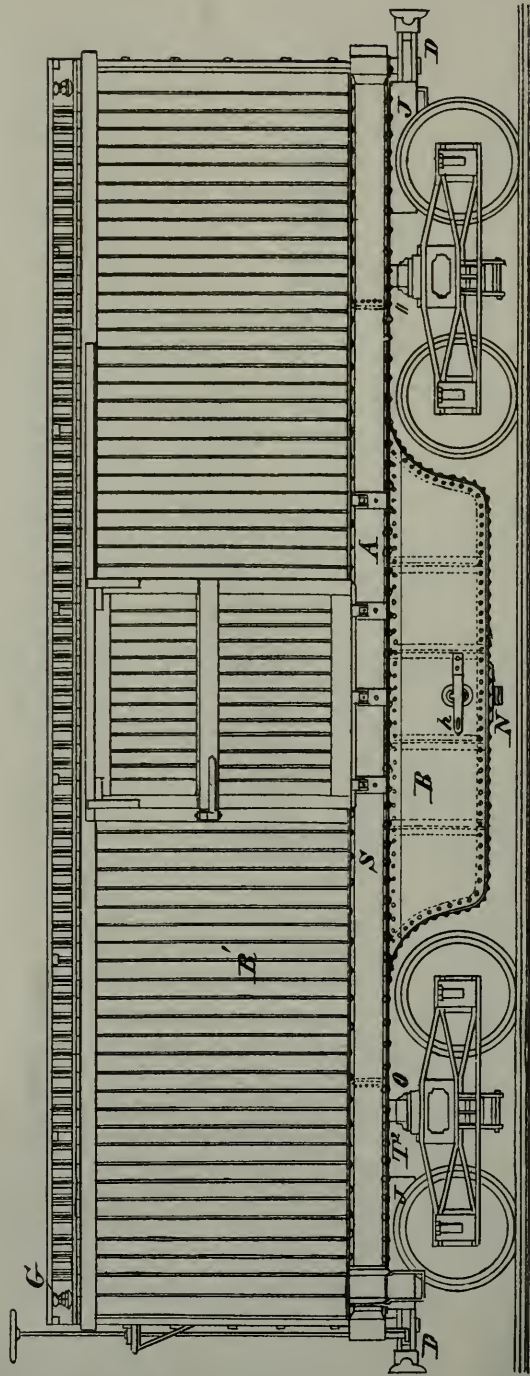
Respondents' Exhibit "2."

H. G. BROOKS.
TANK AND FREIGHT CAR.

No. 190,542.

Patented May 8, 187

Fig. 1.



WITNESSES

Chas. Gooch

S. D. Purditt

INVENTOR

H. G. Brooks

By [Signature]

Respondents' Exhibit "4."

Petroleum Car

No 55,832.

Patented June 26, 1866

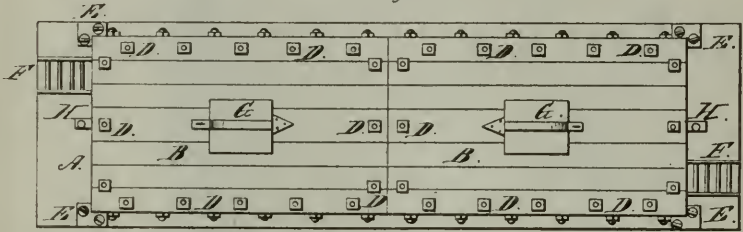


Fig. 7

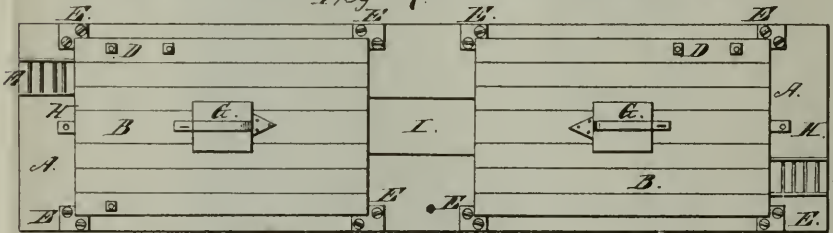


Fig. 8.

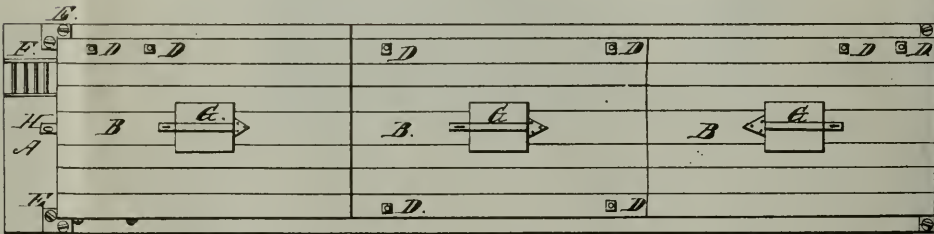


Fig. 5

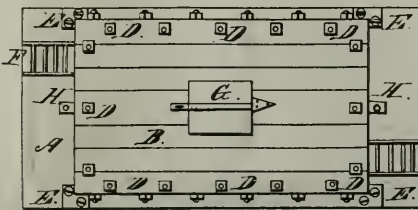
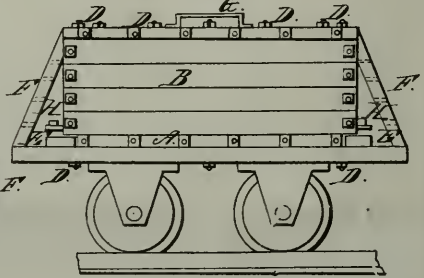


Fig. 1



Witnesses.

A. M. Hatman
W. C. Clayton

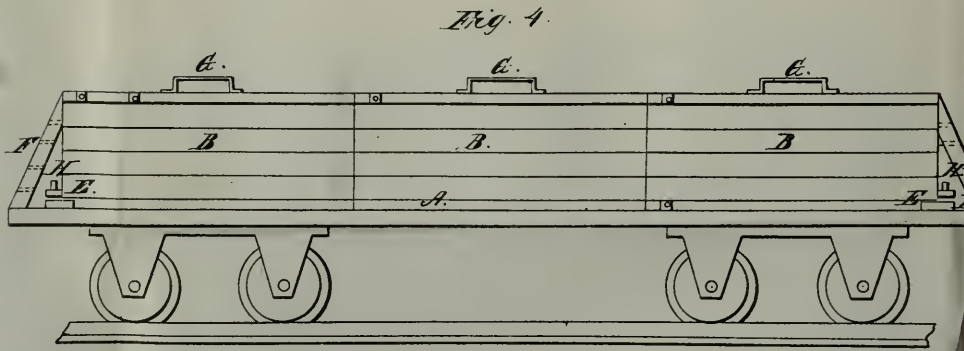
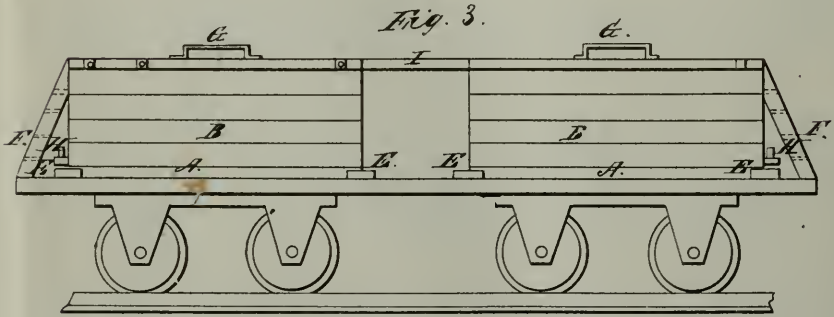
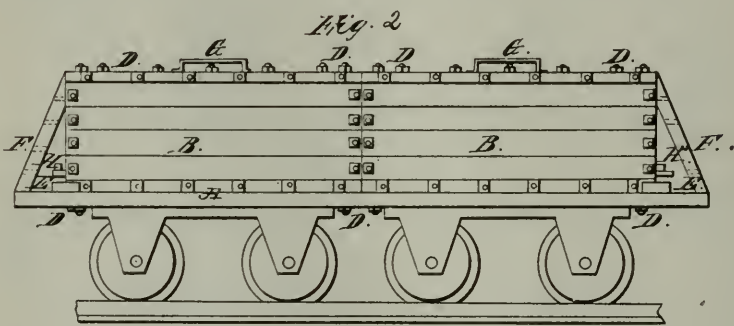
Inventor

Jas. Densmore,
Amos Densmore
&
Geo. W. Yost } by atty
Lo

Petroleum Car.

N^o 55,832.

Patented June 26. 1866.



Witnesses

Inventor

M. Heatman
 R. C. Clayton

Jas. Densmore,
 Amos Densmore, by att
 G. W. N. Vast, Ged

221

Respondents' Exhibit 4.

UNITED STATES PATENT OFFICE.

James Densmore and Amos Densmore, of Meadville, and
George W. N. Yost, of Corry, Pennsylvania.

Improved Car for Transporting Petroleum.

Specification forming part of Letters Patent No. 55,832, dated
June 26, 1866.

To all whom it may concern:

Be it known that we, James Densmore and Amos Densmore, of Meadville, Crawford County, and George W. N. Yost, of Corry, Erie County, Pennsylvania, have invented a new Oil-Tank Car for Carrying Petroleum in Bulk on Railways, being a new and useful improvement on the improved car for transporting petroleum patented to two of us April 10, 1866, and on the inventions of two others of us of a one-tank oil-tank car, and of a three-tank oil-tank car, for which applications for patents have heretofore been made; and the following full, clear, and exact description thereof will show its construction and operation, and enable others to make and use it.

In the accompanying drawings, Figure 1 is a side view of a one-tank car; Figs. 2 and 3, of alternate forms of a two-tank car; Fig. 4, of a three-tank car; and Figs. 5, 6, 7, and 8 are top views of the same, respectively.

On the platform of a common railway-car, A A, erect one tank, two tanks, or three tanks, as shall be determined by the character of the materials and length of car, of square or oblong-square form, of pine or other wood planks, bolted together and fastened to the car.

The one-tank form is peculiarly adapted to such short cars the trucks of which come nearly together under the middle of the car, and to long planks, permitting the tank to be made of greater length, and enabling the sides of which to serve to support the platform from breaking in the middle; but it can be used on any car.

The two-tank form is adapted to any length of car, but more peculiarly to long cars, on which it is desirable to distribute the weight of the load more evenly than the one-tank form readily allows, and is of alternate kinds—first, two square tanks, one at each end, directly over the trucks; and, second, two oblong-square tanks, with one end of each abutting together in the middle of the car, and thus serving to support the platform from breaking.

The three-tank form is peculiarly adapted to short planks and to narrow cars, and may be of two alternate kinds—first,

three square tanks, one over each end and one in the middle, and three oblong-square tanks abutting together in the middle of the car, and serving to support the platform from breaking.

To erect the tanks of the two-tank form the more practicable, simpler, and better, (each tank directly over a truck), and to make them eight feet square and four feet high, take thoroughly-dry wood planks, pine being the better kind, eight and a-half feet long and of any convenient widths. Plane the edges so they can be put together and make perfectly tight joints. For each side of each tank B, take planks of a united width of four feet. Bore five holes through the planks edgewise, through which to put bolts, with a square head at one end and a screw and burr and washer at the other. Make the bolts long enough to go through the thickness of the bottom and top in addition to the planks of the sides, so that the same pressure that screws the planks of the sides together will screw the bottom and top to them. For each bottom and top take planks of a united width of eight feet and the thickness of the two sides. Bolt these planks together, edge to edge, with five bolts running through them, like dowel pins, edgewise. For the ends, take for each planks eight feet long and of a united width of four feet. Put these together edge upon edge, and bore five holes through them edge-wise, through which to put five bolts four feet and the thickness of the top and bottom long between the head and the washer. Set the ends in, so that the bottom, top and sides will jut or project over or by three inches at each end. Screw tight the several bolts running through the top, sides and bottom, and through the top, ends, and bottom, and the tank will be tight at all but four joints. Outside of the ends, through the projections of the sides, pass five bolts through from side to side, equally interspaced from top to bottom, which, when drawn tight by the screws, will make the four remaining joints. To prevent the projections of the side planks from bending in under the pressure of the screws, set up a false end outside of the bolts to act as a brace. Two tanks of this size will hold ten tons, the ordinary load of a common car.

Of the one tank, alternate two tank, and three tank forms, make the tanks in the same manner, of bolts and screws and planks, differing only in proportionate lengths.

To prevent the tanks from moving backward or forward, or jarring from any sudden stopping or starting of the car, bolt down upon the platform at each end and side, the cleats or stops E.

Make the steps F F, the man-heads G G, the faucets H H, and the runway plank I, precisely as described in the specifica-

tion of the patent granted to two of us on the 10th of April, 1866.

The capital letters in this description refer to the parts of the tanks and fixtures marked by the same letters in the drawings.

The nature of our invention consists in combining one, two, or three light, tight, sound, square, or oblong-square wood tanks with a common railway-car, so as to make it or them practically a part of the car, in which to carry petroleum or other liquid substances instead of in barrels, casks, or other movable packages, and *thereby save carrying the weight of the barrels, casks, or other movable packages.*

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The one tank B, square or oblong-square, of wood planks bolted together and attached to an ordinary railway-car, A, by means of the cleats E, and the bolts D D D D, when the same are constructed and combined as hereinbefore described, and for the purposes set forth.

2. The two tanks B B, square or oblong-square, directly over the trucks or abutting together in the middle of the car, of wood planks bolted together and attached to the car A by means of the cleats E E and the bolts D D D D, when the same are constructed and combined as hereinbefore described, and for the purposes set forth.

3. The three tanks B B B, square or oblong-square, of wood planks bolted together and attached to the car A by means of the cleats E E E E and the bolts D D D D, when the same are constructed and combined as hereinbefore described, and for the purposes set forth.

4. The square or oblong-square tank or tanks, of wood planks, attached to an ordinary car, when constructed and combined by any other mechanical contrivance substantially the same and which will produce the same results.

JAMES DENSMORE.

AMOS DENSMORE.

GEORGE W. N. YOST.

Attest:

C. M. BOUSH,

A. SAUERHEBER.

(Endorsed:) Opened and re-filed Feb. 10, 1891. L. S. B. Sawyer, Clerk.

Respondents' Exhibit "5."

Fig. 1.

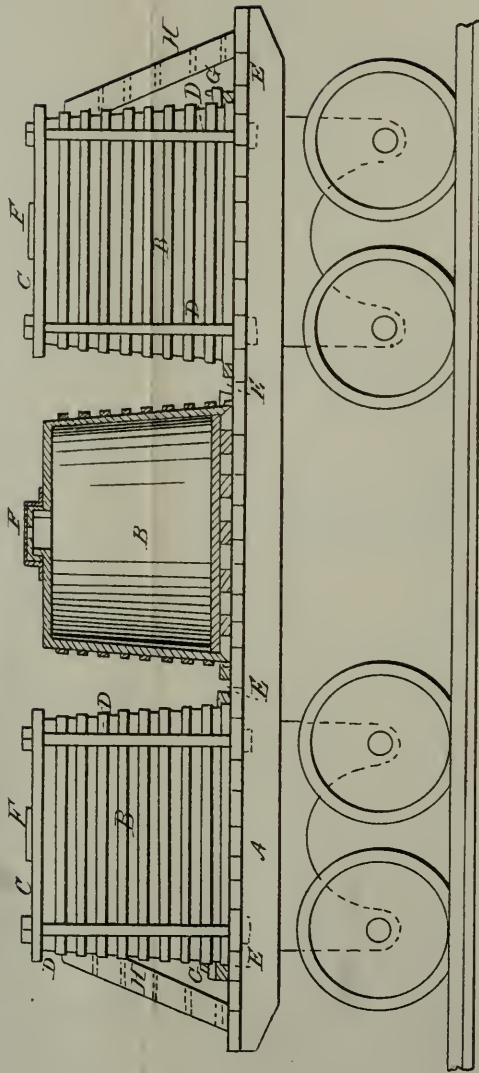
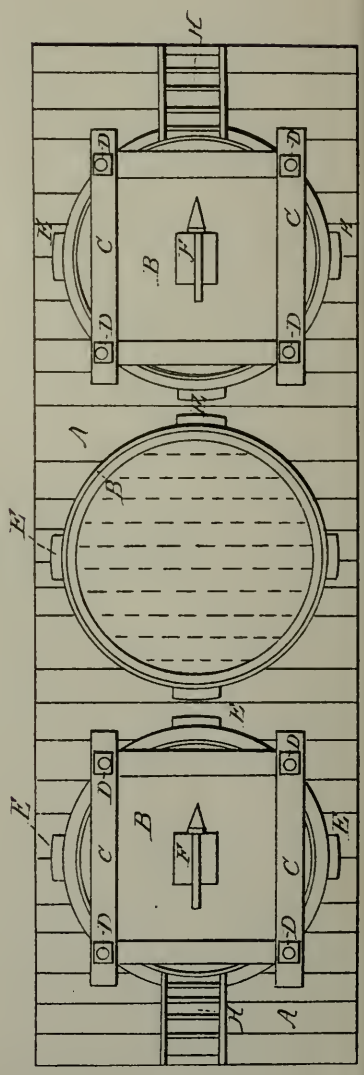


Fig. 2.



Witnesses:

W. D. Peatman
W. H. Clayton

Inventor:

Las Densmore
Geo. W. Yost

222

Respondents' Exhibit 5.

UNITED STATES PATENT OFFICE.

J. Densmore, of Meadville, and G. W. N. Yost, of Corry, Pa.

Improved Car for Transporting Petroleum.

Specification forming part of Letters Patent No. 55,831, dated June 26, 1866.

To all whom it may concern:

Be it known that we, James of Densmore, of Meadville, and George W. N. Yost, of Corry, Pennsylvania, have invented a new and Improved Tank Car for Carrying Petroleum or other Liquid Substances in Bulk on Railways; and we declare the following to be a full and exact description thereof, reference being had to the accompanying drawings, and to the letters and figures marked thereon.

Our invention is an improvement upon and a modification of an invention of James Densmore and Amos Densmore, for which a patent was granted and issued to them on the 10th day of April, 1866; and it consists of a light, tight tank combined with the platform of a common *flat* railway car, so fastened as to make it a fixture and component part of the car, so as to carry the desired substance in one mass bulk, *instead of in barrels, casks, or other vessels or packages, as has heretofore universally been done on railway cars, and thereby save carrying the weight of the barrels, casks, or other vessels or packages.*

Our improvement and modification consists of one tank fastened upon the middle of the platform of the car, instead of two tanks fastened upon the ends of the platform of the car, one directly over each truck, and is peculiarly adapted to such short platform or flat cars as have heretofore been made and used on several railways more commonly than now, whose trucks nearly meet, instead of being fifteen to twenty feet, or more or less, wide apart, as in the now more common style of flat car; but it is readily adaptable to a long platform flat car by properly trestling the sills of the platform, so as to sustain the weight of the tank when filled.

In the accompanying drawings, Figure 1 is a side view of our invention, and Fig. 2 is a top view of it; and the following description of its construction and operation will enable others to make and use it.

Upon the car platform A we make a large tank, B, round, elliptical or square, of light wood staves hooped, or of light sheet-iron riveted and calked, or of any other light, firm material; but we prefer light wood staves, hooped, for simplicity, durability and cheapness combined.

We put the middle of the bottom of the tank upon the middle of the platform of the car. We make the conjugate or cross diameter of the tank equal to the diameter of the platform, and the transverse or length diameter from one foot to two or more feet greater, so as to have the less height to the tank of a capacity of ten to twelve tons of the substance to be carried (the freight capacity of a railway car), and to spread the weight as much as practicable lengthwise upon the platform of the car.

Upon the top of the tank, resting on the chine, we put a square frame of four bars, C C C C, of such a size that the centers of the four corners of the frame shall be directly over the outside edge of the tank at four points. Through the four corners of this frame we pass the four bolts, D D D D, close to and touching the side of the tank at the four points and down through the platform, and we fasten and press the tank to the car by means of screws and collars upon the ends of the bolts below the platform and above the corners of the frame. This frame and these bolts, when screwed tight and pressing the tank upon car, act as guys or braces, and tend to prevent any jar or shock from the swaying of the car while in motion.

The chine of the bottom head or end of the tank we make two inches long from and below the bottom surface of the head or end of the tank, and within the chine, conjugate to the staves or plank of the head or end, we put on four or five cleats, two inches thick, as bearers, to protrude evenly with the chine and to fill the space between the bottom head and the platform, so that the weight of the substance in the tank when filled shall not bend or spring down the planks or staves of the head.

In the top head of the tank we make a man-hole, through which to pour the substance to be carried, and to get into the tank for any purpose, and around the man-hole we put a casing, projecting above the head about two inches, and over the man-hole and casing we put a manhead or cover, E, to prevent rain, snow, dirt, or other thing from leaking or falling into the tank.

Upon the platform, around the bottom of the tank as it sets on the car, and close to its sides, we bolt the heavy cleats or stops F F F F, to keep the tank in its place, and to prevent its being moved by any sudden starting or stopping of the car.

In some part of the side or end of the tank, on a line with the top edge of the bottom head, we put a faucet, G, through which to draw off the contents of the tank, and up the sides or ends of the tank, at or toward each end of the car, we put the steps H H, to enable the brakeman or any one to pass readily from end to end of the car. What we claim as our improvement and modification, our invention, and desire to secure by Letters Patent, is—

The one tank B, attached to and combined with the platform

of a car A, by means of the frame of bars C C C C and the bolts D D D D, over and upon the middle of the platform and car, when constructed and combined as and for the purposes hereinbefore described and set forth, or when attached and combined by any other mechanical construction substantially the same, and which will produce the same results.

JAMES DENSMORE.

GEORGE W. N. YOST.

Witnesses:

JO. C. CLAYTON,

L. E. GUIGNON.

(Endorsed:) Opened and re-filed Feb. 10, 1891. L. S. B. Sawyer, Clerk.

Respondents' Exhibit "6."

J. F. Keeler

Oil & Paint Vessels.

No. 3622.

Reissued Aug. 31, 1869.

Fig. 1.

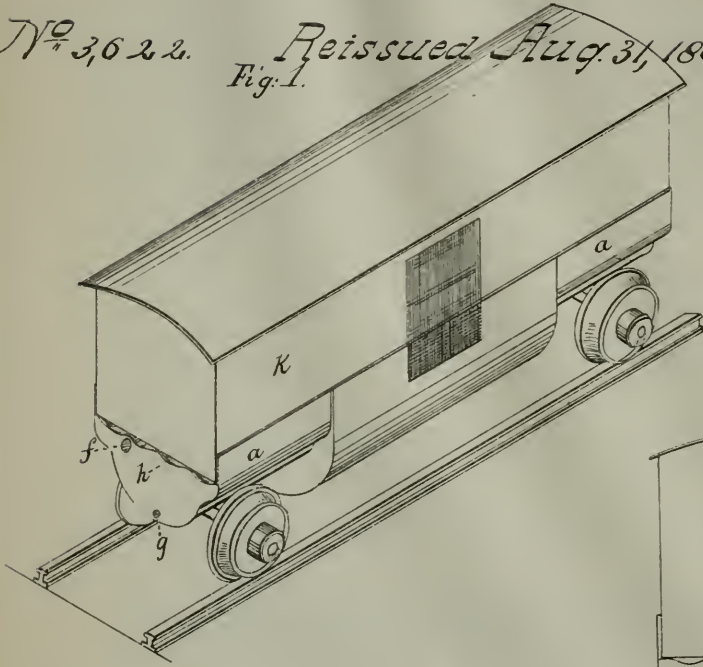


Fig. 3.

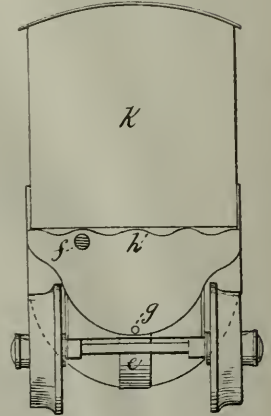


Fig. 2.

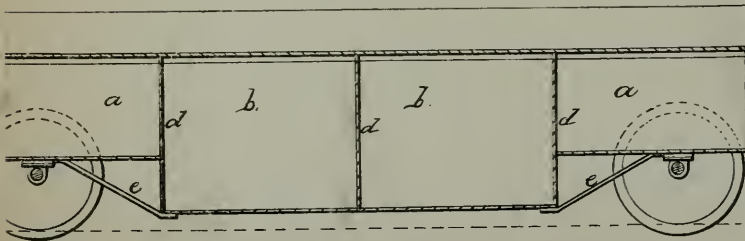
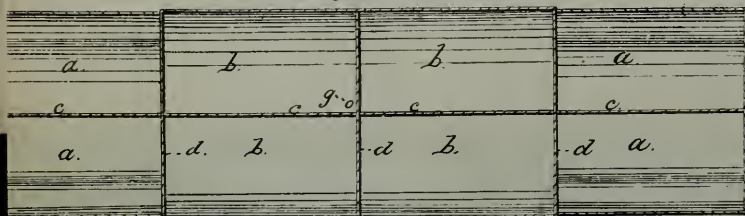


Fig. 4.



Witnesses:
Samuel Graham

Inventor.

J. F. Keeler

223 *Respondents' Exhibit 6.*

UNITED STATES PATENT OFFICE.

Joel F. Keeler, of Pittsburg, Pennsylvania.

Improvement in Railroad-cars for Transporting Petroleum.

Specification forming part of Letters Patent No. 45,834, dated January 10, 1865; Reissue No. 2,031, dated July 18, 1865; Reissue No. 3,622, dated August 31, 1869.

To all whom it may concern:

Be it known that I, Joel F. Keeler, of the city of Pittsburg, County of Allegheny, and State of Pennsylvania, have invented a new and Improved Mode of Constructing Railroad-Cars, better adapting them for the safe transportation of liquids in bulk, as well as for dry freight and passengers, than has hitherto been known and used; and I do declare that the following is a full, clear and exact description of my invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon, like letters referring to like parts, in which—

Figure I is a perspective of my car constructed as a two-storied car. Fig. II is a longitudinal vertical section of the lower part or tank. Fig. III is an exterior end view of my two-storied car. Fig. IV is a horizontal longitudinal section through the lower part or tank.

The nature of my invention consists—

First. In providing a railway-car with a laterally curved, bent, or depressed metal bottom, and, when desirable for use in carrying liquid freight or for other purposes, with metallic sides and tops, forming thereby at will a closed metal tank, and, therefore, fire-proof.

Second. When desirable, I place over such bent, curved, or depressed metallic bottom, at such height as I desire, such a frame-work, K, of wood, metal, or other known substances, of any known form and construction as will adapt it for use as a railway-car for any known purpose.

Third. When I choose, I construct, at any desirable distance above the bottom, a horizontal partition, *h*, which serves as a ceiling or cover for the part below it, and as a floor for the part above it. In this floor I make such holes or openings as I deem proper, and provide them with suitable covers, *thus making a two-storied car*, with both stories covered in from the weather, but accessible to and from each other. When desirable, the lower story is divided into compartments, as shown at *c c* and *d d*, and each compartment provided with holes or hatches, at will.

Fourth. When desirable, that part of the bottom between the fore and hind axles, or the fore and hind trucks, as the case may be, is made to drop lower than the parts over the axles or the trucks, as seen at *b b b b*, and the contents, when liquid, are drawn off from this lowest part, and consequently are entirely drawn off.

Fifth. As the entire invention shows, I dispense in the drawings and specifications with the usual frame-work denominated the "platform" of the car, making the curved or depressed metal-plate bottom *a a* and *b b* subserve the same purposes as the frame-work heretofore used, by putting the supports for the axles and their journal-boxes, or the center-plates for the trucks, as the case may be, directly onto the said depressed metal-plate bottom, as seen in Figs. II and III.

Sixth. When the car is constructed for carrying liquids in bulk, it is provided with openings on the top, as seen at *f f*, Figs. I and III, for filling the tank, and with other openings, as at *g g*, for emptying. (See Figs. I, III and IV.) These openings or holes are closed and opened by means of any known device, and operated in any known way; but, in order to save the time, labor and expense of pumping off the contents near the bottom of the tank, (as was done before the invention of my car), or the bad practice, sometimes enacted, of hauling such contents back and forth, I place the draw-off apparatus of my car at the lowest part of the tank, either in the side of a part made, like *b b*, to drop below the general bottom or through some part of the bottom itself, as seen at *g*, Fig. IV, thus permitting the contents of the tank to flow entirely out by their own gravity. The draw-bars and the bunters are of any known construction, and are attached to the ends of the tank in any known way, whereby the curved bottom is made to serve as the frame-work of the car.

To enable others skilled in the art to make and use my invention, I will proceed to further describe its construction and operation.

I make my car of any known form, size and shape, with the usual appendages of a railway-car attached thereto, and of any known materials, except that I make the bottom of the car of plate iron, steel, or other metal, and of a thickness corresponding with the size and strength desired in the car, but usually from one-eighth to one-fourth inch in thickness. I curve or bend this plate metal whether in sections or in a single piece, in a lateral direction by any given angles or curves and to any known form or shape, turning the external or convex side downward in making up the car, thus making the entire bottom of the car laterally like a species of inverted arch in its general shape or conformation, as shown in Figs. I and III, so

that when resting on its center-plates or trucks, as it is usually made, the bottom braces laterally, and, by this same bending or curving, is rendered a very firm truss for the superstructure that may be built and for the load that may be placed upon it. I usually support the plates or points on the bottom where it rests on the axles or on the trucks, as the case may be, by an additional thickness of metal, either in the original plate or by additional pieces put on. I also attach side bearings of any known construction, and also "center-plates," so called, which I prefer to make broad, using the side bearings but little, except in emergencies of great rolling or twisting of the trucks, and carrying the entire weight usually on the center-plates. I pass king-bolts or center-pins into or through these center-plates and fasten them therein in any known way. I place the car-body either on trucks or on wheels and axles of any known construction and in any known way.

When I desire to construct the car for carrying liquids, I carry up the sides of the curved metal bottom with additional plates of metal until the desired capacity is attained. I then cover it over with such a cover as I prefer of any fire-proof material known, usually of metal, so as to render it a close metallic tank, providing it with man-holes, fill-holes, &c., at the top, and such draw-off holes at the bottom (provided with stoppers, plugs, and cocks of any known construction) as that the entire contents of the tanks may be draw off by their own gravity, without either pump or siphon. This is one of the distinguishing features of my car, as previous to its invention all cars for carrying liquids in bulk had their draw-off devices put into the sides of their tanks, instead of through their bottoms, and so far above their bottoms as to leave large quantities of the liquid in the tanks (especially when of considerable size) that could not run out, and therefore had either to be hauled back and forth necessarily or be pumped out at considerable trouble and expense.

When I construct the car for carrying dry freight or passengers, I place over the curved bottom (carried up to such height as I choose) and attach thereto a frame for a car, of any materials, size, shape, or construction known, and provided with such doors, windows, or other appurtenances as belong to freight or passenger cars. If intended for both liquid and dry freight or passengers at the same time, or for *liquid freight in one direction and dry freight in the other*, then I calk the lower part; but if I use the lower part also for dry freight, as I sometimes do, and the upper for either dry freight or passengers, then calking is not needed at the bottom.

Prior to the invention of my car all cars for the carrying of liquids in bulk had tanks, which were placed on wooden plat-

forms that constituted the frame-work of the cars, and at a considerable height above those platforms, which arrangement required the tanks to be made of great length, and consequently of great weight; or else, if made compact and of sufficient size to carry a fair load—say one hundred barrels of petroleum—the car would be rendered top-heavy and liable to upset. It would also strain the rails of the road and the structure of the cars. Now, in order to obviate these difficulties and dangers, I make my car in such a manner that the tank for holding the liquid lies down as low as the tops of the wheels, or, if desired, as low as to the axles, placing my draw-bars and bunters at the usual height for connection with other cars.

Railway tank-cars are, practically, confined to the carrying of petroleum and its products—an article so inflammable in its nature as almost to defy the ingenuity of man for the preservation either of itself or of its surroundings from devastating conflagrations. In order to prevent these dangers from fire as far as practicable, I have constructed my car in such a manner that all its important or material parts, including the connections that hold the running-gear together, are incombustible. In other words, I have made it fire-proof.

Not limiting myself to the precise description herein set forth, but claiming the use of any known device or material of like functions, what I claim as my invention, and desire to secure by Letters Patent, is—

1. The construction of a fire-proof railway tank freight-car, substantially as described.
2. The construction of railway tank freight-cars in such a manner that the tank constitutes, substantially, the frame-work of the car.
3. The construction of tank freight-cars in such a manner that their tanks or some parts thereof are carried as low as the tops of the car-wheels, substantially as described.
4. A metallic inverted-arch truss or bottom in the construction of railway-cars, substantially as described.
5. The construction of railway-cars having two inclosed stories, substantially as described.
6. The construction of railway tank-cars, with tanks having a depression in their bottoms through which their contents are drawn off, substantially as described.

JOEL F. KEELER.

Witnesses:

M. D. EDWARDS,
AND. HUMBERT,
FRANK BUSHNELL.

(Endorsed:) Opened and refiled Feb. 10, 1891. L. S. B. Sawyer, Clerk.

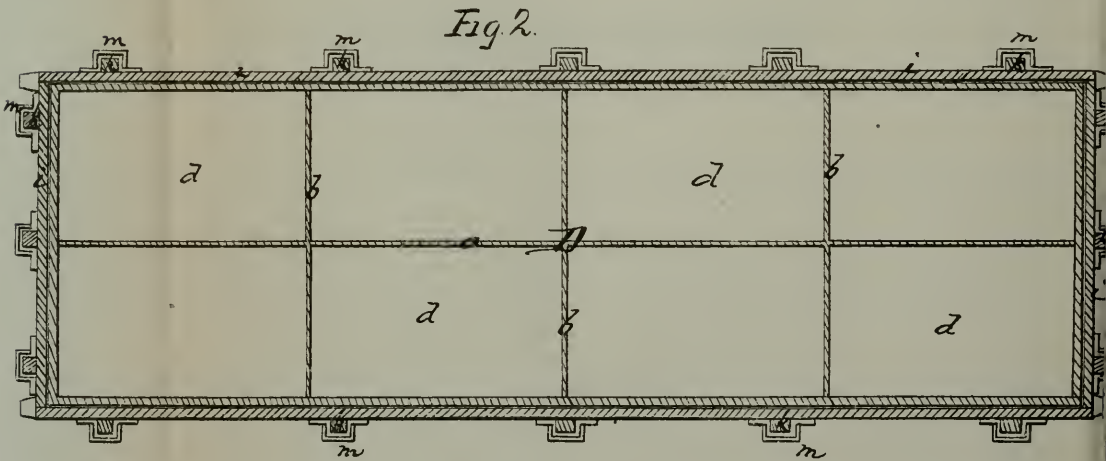
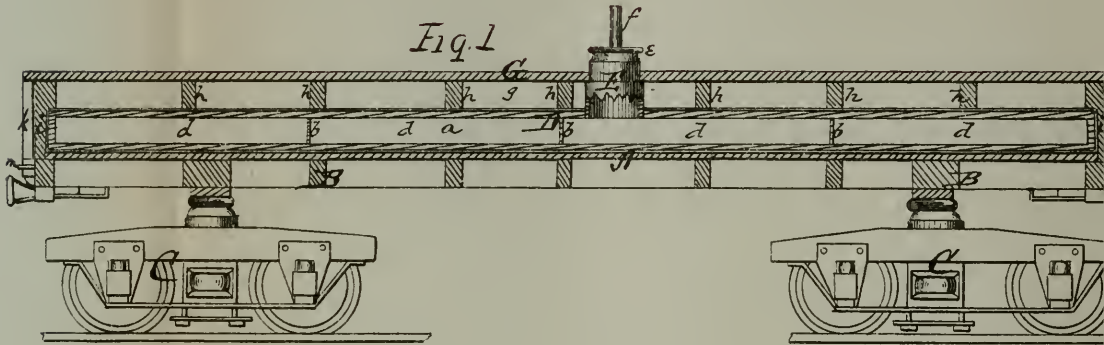
Respondents' Exhibit "7."

JOHN CLARK.

Improvement in Cars for Carrying Petroleum.

No. 4,788.

Reissued March 5, 1872.



Witnesses:

James O. Hutchinson
per

Inventor

John Clark.
per

224

Respondents' Exhibit 7.

4,788.

UNITED STATES PATENT OFFICE.

John Clark, of Canandaigua, New York.

Improvement in cars for carrying petroleum.

Specification forming part of Letters Patent No. 40,458, dated November 3, 1863; reissue No. 4,788 dated March 5, 1872.

To all whom it may concern:

Be it known that I, John Clark of Canandaigua, in the county of Ontario and State of New York, have invented certain new and useful Improvements in Cars for Carrying Petroleum, &c., in bulk; and I do hereby declare that the following is a full, clear and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists, first, in a shallow tank, provided with partitions and used upon an ordinary platform-car, for carrying petroleum in bulk; and, second, in the combination, with a shallow tank for carrying petroleum in bulk arranged upon the platform of a railroad car, of a removable deck or cover, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing which forms a part of this specification, and in which—

Figure 1 is a longitudinal vertical section, and Fig. 2 a horizontal section of my improved car for carrying petroleum.

A represents the platform of an ordinary dirt or package car, which rests on a frame, B, supported by two or more trucks, C. D is a shallow tank, made of sheet metal or other suitable material of sufficient strength, and impervious to petroleum. This tank extends the entire length and width of the car, and rests upon the platform A. It is also strengthened by one or more longitudinal partitions or bulk-heads, *a*, and transverse partitions or bulk-heads *b*, which divide the interior of said tank into a number of compartments, *d*, so as to obviate the splashing of the oil when the car is in motion. The oil is introduced through a cylindrical spout, E, which extends up through deck of the car, and is closed by a screw-plug, *e*. This plug is provided with a vent-pipe, *f*, to allow the gas to escape which rises from the petroleum, particularly when the same is agitated or when a violent motion is imparted to it. G represents the deck

of the car, which is strengthened by two longitudinal timbers, *g g*, attached to its under side near to its edges, and by a series of transverse timbers, *h h*, two of which connect with the ends of the longitudinal timbers *g*, while the balance extends from one of said timbers to the other under the deck at suitable intervals. The timbers *g h* are supported by the sides *i*, which rest upon the platform A close to the sides of the tank D, and are of such a height that the timbers will clear the upper surface of the tank. Standards *k k*, which are firmly secured to the outside of the sides *i i* under the edges of the deck G, and which fit into loops *m* secured to the outside of the frame B, hold the deck, together with the timbers and sides attached to it, in the proper position.

The tank is filled through the spout E, and is emptied through a suitable faucet or faucets. When it has been filled and the spout closed the deck or cover G can be used for carrying dirt, barrels, or any other material or goods precisely as an ordinary platform-car. In the same way, when the tank is empty, the deck may be used for carrying barrels or other materials, or the deck and tank may be removed, when the ordinary platform-car remains for any use desired. The tank does, in fact, not interfere with the ordinary functions of the car, and a quantity of petroleum can thus be carried from place to place without incurring the expense of barrels, and perfectly safe from leakage.

Having thus fully described my invention, what I claim as new, and desire to secure by letters patent, is—

1. The removable tank D, provided with partitions, and used in combination with an ordinary platform-car, substantially as and for the purposes herein set forth.

2. In combination with a shallow tank for carrying petroleum in bulk arranged upon the platform of a railroad car, I claim a removable deck or cover, constructed and arranged substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 11th day of January, 1872.

JOHN CLARK.

Witnesses:

C. L. EVERT,
JOHN SMITH.

(Endorsed:) Opened and refiled Feb. 10, 1891. L. S. B. Sawyer, Clerk.

Respondents' Exhibit "8."

J. Clark,
Petroleum Car.

No 40,458.

Patented Nov. 3, 1863.

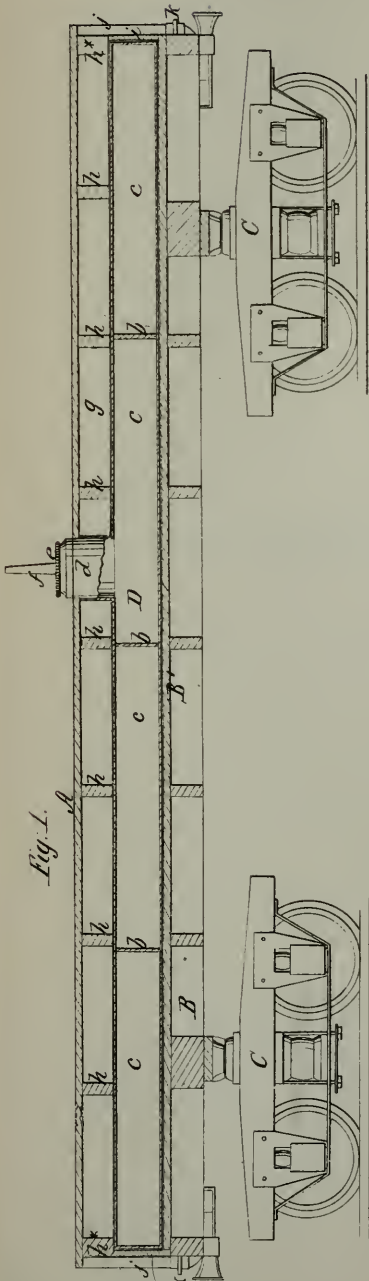
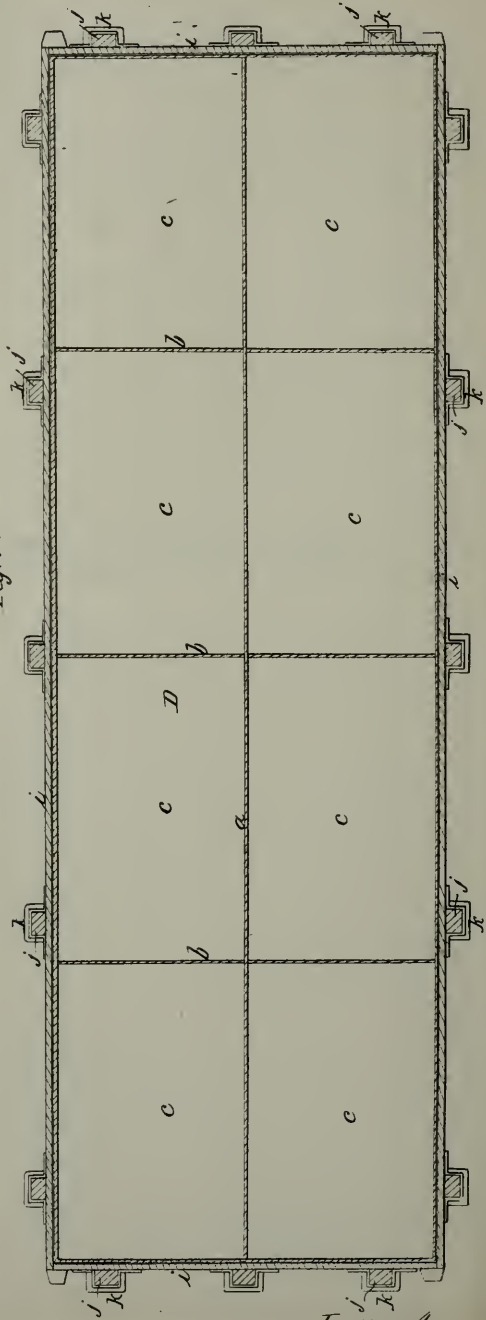


Fig. 2.



Witnesses;
J. Wolcott

Inventor;
J. Clark

225

Respondents' Exhibit 8.

UNITED STATES PATENT OFFICE.

John Clark, of Canandaigua, New York.

Improvement in Cars for Carrying Petroleum.

Specification forming part of Letters Patent No. 40,458, dated November 3, 1863.

To all whom it may concern:

Be it known that I, John Clark, of Canandaigua, in the County of Ontario and State of New York, have invented a new and useful Improvement in Cars for *Carrying Petroleum, etc., in Bulk*; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a longitudinal vertical section of my invention. Fig. 2 is a horizontal section of the same.

Similar letters of reference in both views indicate corresponding parts.

This invention consists in the application of a tank, of sheet metal or other suitable material, under the platform of an ordinary railroad car in such a manner that a large quantity of petroleum can be carried in bulk, and at the same time the car can be used in its ordinary capacity as a package or dirt car.

To enable those skilled in the art to make and use my invention, I will proceed to describe it.

A represents the platform of an ordinary dirt or package car, which rests on a frame, B, supported by two or more trucks, C.

D is a tank, made of sheet metal or other suitable material of sufficient strength for the occasion, and impervious to petroleum. This tank extends throughout the entire length and width of the car under the platform A, which is raised sufficiently high to make room for said tank. The tank itself rests on the frame B, and said frame may be provided with a second platform or bottom B', to form a strong and substantial support for the tank. It (the tank) is strengthened by one or more longitudinal partitions or bulk-heads, *a*, and transverse partitions or bulk-heads, *b*, which also divide the interior of said tank into a number of compartments, *c*, so as to obviate the splashing of the oil when the car is in motion. The oil is introduced through a cylindrical spout, *d*, which extends up through the platform A, and is closed by a screw-plug, *e*. This plug is provided with a vent-pipe, *f*, to allow the gas to escape which rises from the petroleum, particularly when the same is agitated or when a violent motion is imparted to it.

The platform A is strengthened by two longitudinal timbers, *g*, attached to its under side near to its edges, and by a series of transverse timbers, *h h**, two of which connect with the ends of the longitudinal timbers, *g*, while the balance extends from one of said timbers to the other under the platform at suitable intervals. The timbers *g h** are supported by planks *i*, placed edgewise on the frame B of the car, and these planks are of such a height or width that the timbers *g h h** clear the upper surface of the tank D. Standards *j*, which are firmly secured to the outside of the timbers *g h** under the platform, and which fit into loops *k*, secured to the outside of the frame C, hold the platform, together with the timbers and planks attached to it, in the proper position.

The tank is filled through the spout *d*, and it is emptied through a suitable faucet or faucets. When it has been filled and the spout closed, the platform A can be used for carrying dirt or any other material or goods, precisely as an ordinary platform. The tank does not interfere in any way with the ordinary functions of the car, and a quantity of petroleum can thus be carried from place to place without incurring the expense of barrels, and perfectly safe from leakage.

What I claim as new, and desire to secure by Letters Patent, is—

The application of a tank, D, under the platform A of a railroad car, substantially as and for the purpose specified.

JOHN CLARK.

Witnesses:

JAMES W. ANDERSON,
HENRY M. FIELD.

(Endorsed:) Opened and re-filed Feb. 10, 1891. L. S. B. Sawyer, Clerk.

226 In the Circuit Court of the United States for the Northern District of California.

STANDARD OIL COMPANY OF IOWA, Complainant,	} No. 10,575.
<i>vs.</i>	
SOUTHERN PACIFIC COMPANY AND WHITTIER, FULLER & COMPANY, Respondents.	

Petition of Complainant for an order allowing an Appeal, and Assignment of Errors on Appeal.

The Standard Oil Company of Iowa, complainant in the above entitled cause, feeling itself aggrieved by the decretal order made by this Court on the 12th day of October, 1891, and the decree made, entered and filed on the said day in pursuance of said order, whereby it was ordered, adjudged and decreed

that the complainant's bill of complaint herein be dismissed with costs to the respondents, comes now into Court, by its counsel, Messrs. Pillsbury, Blanding and Hayne, and Langhorne and Miller, and petitions this Honorable Court for an order allowing said complainant to prosecute an appeal from said decree to the Honorable, the United States Circuit Court of Appeals for the Ninth Circuit, under and according to the laws of the United States, in that behalf made and provided, and also that an order be made fixing the amount of security which said complainant shall give and furnish upon said appeal, and that upon the giving of such security, all further proceedings in this Court be superseded and stayed until the determination of said appeal by said Circuit Court of Appeals.

And the said complainant now specifies as the errors upon which it will rely upon said appeal, the following:

Assignment of Errors.

I.

Error of the Court in holding that no new or useful result was accomplished by the combination of elements shown, indicated, described and claimed in and by the letters patent herein sued on.

II.

Error of the Court in holding that the cheapening of the transportation of oils in bulk over long hauls was not a new and useful result, although it was admitted and clearly shown that said result was accomplished by the device covered by the patent sued on.

III.

Error of the Court in holding that the patent sued on was void on the ground that no new and useful result was accomplished by the device patented, because it clearly appears from the evidence that a new and useful result was accomplished by the patented device, to wit: the cheaper transportation of oils in bulk over long hauls.

IV.

Error of the Court in holding that there is no joint operation or effect in the construction of the railway car and the oil tank, referred to in the patent sued on, which is in any manner due to the simultaneous or successive action of the two as combined.

V.

Error of the Court in holding that the device described and claimed in the patent sued on is a mere aggregation of old elements producing no new result by their combination.

fore filed and entered herein, be and the same hereby is allowed, and that a certified transcript of the record, testimony, exhibits, stipulations and all proceedings herein be forthwith transmitted to the said United States Circuit Court of Appeals.

And it is further ordered, that the bond be fixed at the sum of five hundred dollars, the same to act as a supersedeas bond, and also as a bond for the costs and damages on appeal, and that complainant be allowed five days within with to file said bond.

230 In the Circuit Court of the United States, for the Northern District of California.

STANDARD OIL COMPANY OF IOWA, Complainant,	} No. 10,575.
vs.	
SOUTHERN PACIFIC COMPANY AND WILLIAM F. WHITTIER, WILLIAM P. FULLER, FREDERICK N. WOODS AND WILLIAM P. FULLER, JR., doing business in the City and County of San Francisco, State of California, under the firm name of WHITTIER, FULLER & Co., Defendants.	

Supersedeas and Cost Bond on Appeal.

Know all men by these presents, That we, Lloyd Tevis and Henry Wadsworth, are jointly and severally held and firmly bound unto the Southern Pacific Company and unto William F. Whittier, William P. Fuller, Frederick N. Woods and William P. Fuller, Jr., doing business in the City and County of San Francisco, State of California, under the firm name of Whittier, Fuller and Company, defendants in the above entitled suit, in the penal sum of five hundred dollars, lawful money of the United States of America, to be paid to the said Southern Pacific Company, William F. Whittier, William P. Fuller, Frederick N. Woods and William P. Fuller, Jr., doing business in the City and County of San Francisco, State of California, under the firm name of Whittier, Fuller and Company, their successors, executors, administrators and assigns, for the payment of which sum, well and truly to be made, we bind ourselves, and each of us, jointly and severally, firmly by these presents.

Sealed with our seals and dated this 3rd day of November, 1891.

231 The condition of the above obligation is such, that, Whereas, on the 12th day of October, A. D. 1891, a final decree was made and entered in the above entitled case by the above entitled Court, wherein and whereby it was ordered,

adjudged and decreed that the complainant's bill of complaint be dismissed and that the said defendants have and recover from the complainant their costs, amounting to the sum of one hundred and twenty-five dollars, which said final decree has been duly docketed and enrolled; and,

Whereas, on the 2nd day of November, A. D. 1891, said complainant presented to the said Court, and filed with the Clerk thereof, a petition in writing for an order allowing an appeal from said decree to the United States Circuit Court of Appeals for the Ninth Circuit, which said petition was accompanied by an assignment of errors, in writing, as provided by the rules of said Court, and of the said Circuit Court of Appeals; and,

Whereas, said above entitled Court did, on said last named day, make and cause to be entered by the Clerk an order allowing said appeal, and fixing the amount of security to be furnished by the complainant on said appeal in the sum of five hundred dollars, the same to act as a supersedeas bond and also as a bond for costs and damages on appeal; and,

Whereas, the complainant desires to have said final decree superseded and execution thereon stayed pending said appeal.

Now, therefore, if the above named Standard Oil Company of Iowa, complainant and appellant, shall prosecute its said appeal to effect and answer all costs and damages that may be awarded against it if it shall fail to make good its plea, including just damages against it for delay and costs and interest on appeal,

then the above obligation shall be void, otherwise to remain in full force and effect.

LLOYD TEVIS, [SEAL.]

H. WADSWORTH. [SEAL.]

Signed, sealed and acknowledged in the presence of
JAMES L. KING.

STATE OF CALIFORNIA, }
City and County of San Francisco, } ss.

On this 3rd day of November, A. D. 1891, before me, James L. King, a Notary Public in and for said city and county, residing therein, duly commissioned and sworn, personally appeared Lloyd Tevis, and Henry Wadsworth, known to me to be the individuals described in, whose names are subscribed to, and who executed the within instrument, and acknowledged to me that they executed the same.

In witness whereof, I have hereunto set my hand, and affixed my official seal, in the City and County of San Francisco, the day and year last above written.

[SEAL.]

JAMES L. KING,
Notary Public.

308 California St., San Francisco.

(Endorsed:) Form of bond and sufficiency of sureties approved, (signed) Wm. W. Morrow, Judge. Filed Nov'r 6th, 1891. L. S. B. Sawyer, Clerk.

233 *Order allowing withdrawal of original Exhibits.*

At a stated term, to wit: the July term, A. D. 1891, of the Circuit Court of the United States of America, of the Ninth Judicial Circuit, in and for the Northern District of California, held at the court room in the City and County of San Francisco, on Thuesday the 17th day of November, in the year of our Lord one thousand eight hundred and ninety-one.

Present: The Hon. William W. Morrow, U. S. District Judge.

STANDARD OIL COMPANY OF IOWA,	}	No. 10,575.
<i>vs.</i>		
SOUTHERN PACIFIC COMPANY ET AL.		

Good cause appearing therefor, it is ordered that the original Exhibits, Complainant's Exhibits D, and I, and Respondents' Exhibits 1, and 9, the same being four model exhibits, heretofore filed herein, be allowed to be withdrawn from the files of this cause for the purpose of being transmitted to the United States Circuit Court of Appeals for the Ninth Circuit, as a part of the record upon appeal to the said Circuit Court of Appeals: the said original exhibits to be delivered to the solicitors for the appellant herein, and to be returned to the files of this cause in this court, upon the final determination of said appeal in said United States Circuit Court of Appeals for the Ninth Circuit.

In the Circuit Court of the United States, Ninth Judicial Circuit, Northern District of California.

STANDARD OIL COMPANY OF IOWA,)	No. 10575.
<i>vs.</i>		
SOUTHERN PACIFIC COMPANY ET AL.		

I, L. S. B. Sawyer, Clerk of the Circuit Court of the United States of America, of the Ninth Judicial Circuit, in and for the Northern District of California, do hereby certify the foregoing two hundred and thirty-three written and printed pages, numbered from 1 to 233 inclusive (together with the original "Complainant's Exhibit D," "Complainant's Exhibit I," "Respondents' Exhibit 1," and "Respondents' Exhibit 9," which said original exhibits are models, and by order of Court accompany and form a part of this transcript), to be a full, true and correct copy of the record and of the proceedings in the above and therein entitled suit, and that the same, together, constitute the transcript of the record on appeal to the United States Circuit Court of Appeals for the Ninth Circuit.

In testimony whereof I have hereunto set my hand, and affixed the seal of said Circuit Court, this 18th day of November, A. D. 1891.

[Seal of U. S. Circuit Court, Northern District of Cal.]

L. S. B. SAWYER,
*Clerk U. S. Circuit Court, Ninth Judicial Circuit,
Northern District of California.*

UNITED STATES OF AMERICA, ss:

The President of the United States: To the Southern Pacific Company, a corporation, William F. Whittier, Margaret H. Fuller, executrix of the will of William P. Fuller, deceased, Frederick N. Woods, William P. Fuller, Jr., and Whittier, Fuller & Company, Greeting:

You are hereby cited and admonished to be and appear at a United States Circuit Court of Appeals, for the Ninth Circuit, to be holden at the City of San Francisco, in the State of California, on the 15th day of December next, pursuant to an order allowing appeal entered in the Clerk's office of the Circuit Court of the United States, for the Northern District of California, from the decree filed and entered on the 12th day of October, 1891, in that certain suit wherein the Standard Oil Company of Iowa is complainant and appellant and you are respondents and appellees, to show cause, if any there be, why the decree rendered against the said Standard Oil Company of Iowa, as in the said order allowing appeal mentioned, should not be corrected, and why speedy justice should not be done to the parties in that behalf.

Witness, the Honorable William W. Morrow, Judge of the United States District Court for the Northern District of California, this 16th day of November, A. D. 1891.

WM. W. MORROW,
District Judge, Acting Circuit Judge.

Service of within citation admitted this 16th day of November, A. D. 1891.

FRANK SHAY,
Sol. for Southern Pacific Co.
JNO. L. BOONE,
Sol. for other Def'ts.

(Endorsed:) Filed November 17, 1891. L. S. B. Sawyer, Clerk U. S. Circuit Court, Ninth Circuit, Northern District of California.

Respondents' Exhibit "3."

A. P. ODELL.

Oil-Car.

No. 163,515.

Patented May 18, 1875

Fig. 1.

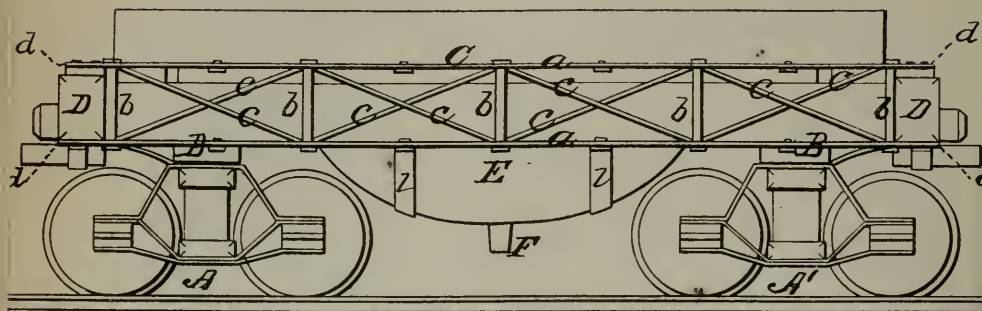


Fig. 2.

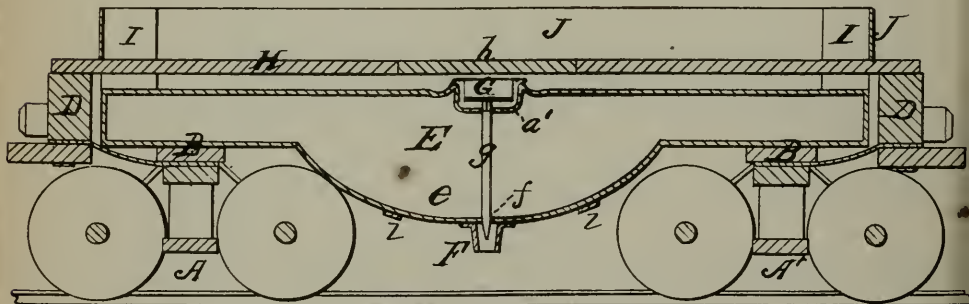
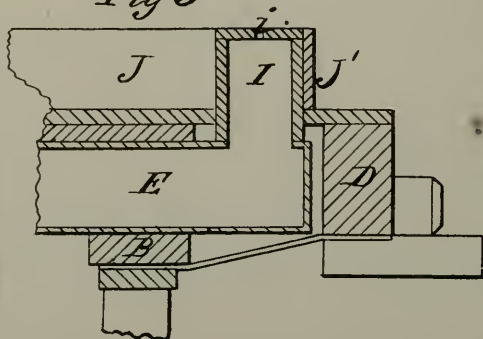


Fig 3



WITNESSES

Eng. H. Johnson.

INVENTOR

Albert. P. Odell

220

Respondents' Exhibit 3.

UNITED STATES PATENT OFFICE.

Albert P. Odell, of Oil City, Pennsylvania.

Improvement in Oil-Cars.

Specification forming part of Letters Patent No. 163,515, dated May 18, 1875; application filed January 2, 1875.

To all whom it may concern:

Be it known that I, Albert P. Odell, of Oil City, in the county of Venango and State of Pennsylvania, have invented a new and valuable Improvement in Bulk-Oil Cars; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a side elevation of my oil-car. Fig. 2 is a vertical longitudinal sectional view of the same, and Fig. 3 is a sectional detail view.

This invention has relation to improvements in cars which are designed for transporting oil in bulk. The object of the invention is to construct a car adapted for transporting oil which shall also be applicable to other purposes, and to provide adequate means for supporting the weight of the oil in the tank and the superstructure thereon. To this end the nature of invention consists in *suspending an oil-tank below the floor of an ordinary freight car by means of a truss*; also, in the construction of the parts, as will be hereinafter more fully set forth.

In the annexed drawings, A A' designate two railway-trucks of the usual construction, in connection with which I propose to show the use and application of my improved oil-tank. B designates a strong wooden bolster, to which the trucks A A' are pivoted in any suitable manner, upon which are rigidly secured compound trusses C. These trusses consist of two strong metallic bars, *a*, of suitable rigidity, transversely braced by rods *b* and diagonals *c*, and they are arranged upon bolsters B parallel to each other. The ends of bars *a* terminate in a broad plate, *d*, between which is arranged, at each end of the trusses, a transverse end beam, D, the same being rigidly secured in position by means of suitable bolts. *The trusses C and end bars D constitute the frame-work of the car-body.* E designates an oil-tank, made of any suitable metal, which is of the same length and width as the space bounded by trusses C and end bars D, and is adapted to be snugly received between them, as shown in Fig. 1, with its lower surface resting upon bolsters B, and its upper

surface flush or nearly so, with the upper horizontal surface of trusses C. This tank is provided with an enlargement, *e*, with a view to increasing its capacity, situated between the trucks A A', and extending downwardly between the same, as shown in Fig. 2, to which enlargement, and preferably in a central position, is secured an eduction-pipe, F, communicating with the interior of the tank by means of an aperture, *f*, cut through the wall of the enlargement of circular form. This opening is closed by an endwise-movable rod, *g*, having a tapering lower end, adapted to be received into the said opening and held in a vertical position by means of a guide, *a'*, through which it passes. When this rod is raised its lower end escapes from aperture *f*, and allows the oil to escape through eduction-pipe F. Oil is introduced into the tank by means of an opening in the upper part of the tank, which is closed by a screw-cap, G, the lower flat surface of which bears forcibly against the upper end of rod *g* when it is screwed home, thereby effectually preventing the casual escape of the said rod from its seat *f*. It has been a frequent cause of complaint in loading oil-cars that allowance must always be made for expansion of the oil under a higher temperature, and that, consequently, where close tanks are used they cannot be filled to their full capacity, both because of the said expansion and of the generation of gases during transportation.

I remedy this by supplying the tank with supplemental chambers or domes I, opening into the interior of the same, as shown in detail in Fig. 3, and preferably at the corners or angles of the said tank, into which the oil will ascend during its expansion, thereby relieving the body of the tank of strain, whereby it is frequently rendered leaky. The upper horizontal surface of these chambers is provided with a perforation, *i*, through which gases will be allowed to have exit into the open air.

In practice the end bars of the frame may be rounding or circular, or they may be vertical to the two trusses, as shown in the drawings. I may also cause the vertical height of the tank to be slightly less than the distance between the bars *a* of the trusses, in which case I propose to floor the upper horizontal surface of the tank, access being had to screw-cap G by means of a removable trap-door, *h*, cut through the floor H. In this manner the oil-car is converted into a flat, which may be used for many purposes, such as the transportation of machinery too bulky to be put into a box-car.

By securing to the floor H upright sideboards J and endboards J', the flat is converted into a gondola, well adapted for transporting coal, sand, gravel, or other like substances.

With a view to supporting the enlargement *e* of the tank

against sagging under the weight of oil accumulating therein, I have made use of strong metallic straps *l*, rigidly secured to the lower bars *a* of trusses *C*, which straps closely embrace the said enlargement, and extend transversely from side to side of the car-frame, thereby affording the tank adequate support, and enabling it to resist downward displacement.

What I claim as new, and desire to secure by letters patent, is—

1. The combination, with an ordinary freight-car, of a truss and an oil-tank, suspended below the floor of the car by the truss, all substantially as and for the purpose set forth.

2. The combination, with an oil-tank, of the car-floor *H*, having trap-door *h* and raised sides and ends *J J*, substantially as set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ALBERT P. ODELL.

Witnesses:

A. M. PORTERFIELD,

J. Q. A. WELLER.

(Endorsed:) Opened and re-filed Feb. 10, 1891. L. S. B. Sawyer, Clerk.

